UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 10,966,025 B2
APPLICATION NO. : 16/670109
DATED : March 30, 2021
INVENTOR(S) : Christopher Kallai et al.

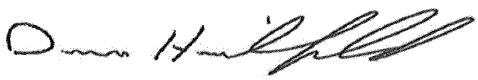
It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

In Claim 13, at Column 24, Lines 45-46, please delete:
"wherein the .
other signal comprises"

And replace it with:
-- wherein the other signal comprises --

Signed and Sealed this
Seventeenth Day of August, 2021



Drew Hirshfeld
Performing the Functions and Duties of the
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

UNITED STATES PATENT AND TRADEMARK OFFICE
Docket No.: 11-0401-CON1019A (0383573)

In the Application of:	)	
	)	
Kallai et al.	)	Examiner: McCord
	)	
Ser. No.: 16/670,109	)	Art Unit: 2654
Filed: October 31, 2019	)	
	)	Conf. No.: 7387
Patent No.: 10,966,025	)	
Issued: March 30, 2021	)	
	)	
Title: Playback Device Pairing	)	

Commissioner for Patents
Office of Data Management Attention: Certificates of Correction Branch
P.O. Box 1450
Alexandria, Virginia 22313-1450

REQUEST FOR CERTIFICATE OF CORRECTION
PURSUANT TO 35 U.S.C. § 255 AND 37 C.F.R. § 1.323

This is a request for issuance of a Certificate of Correction for U.S. Patent No. 10,966,025 ("the '025 patent"), which was issued on March 30, 2021.

Pursuant to 35 U.S.C. § 255 and 37 C.F.R. § 1.323, Sonos, Inc., Assignee of Record (Reel/Frame 056118 / 0534), seeks to correct a good-faith mistake of a clerical and/or typographical nature in the '025 patent. In particular, Assignee seeks to delete an extraneous period and carriage return appearing in claim 13 (which was claim 14 during prosecution) as follows:

In claim 13, at column 24, lines 45-46, please delete:

"wherein the .
other signal comprises"

and replace it with -- wherein the other signal comprises --

Assignee submits that the requested change (i) merely corrects a formatting error that was inadvertently introduced with the 37 C.F.R. § 1.312 Amendment filed on February 16, 2021, (ii) does not constitute new matter, and (iii) does not require substantive examination of the file.

Please charge any underpayment or credit any overpayment of fees to Deposit Account No. 50-0951.

Assignee submits herewith a completed Certificate of Correction Form (PTO/SB/44). Please contact the undersigned at 312-634-5738 with any questions or comments regarding this Request.

Respectfully submitted,
Akerman LLP

Date: July 8, 2021

By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

PTO/SB/44 (09-07)
Approved for use through 03/31/2023. OMB 0651-0033
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 10,966,025

APPLICATION NO.: 16/670,109

ISSUE DATE : March 30, 2021

INVENTOR(S) : Christopher Kallai et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In claim 13, at column 24, lines 45-46, please delete:

"wherein the .
other signal comprises"

and replace it with -- wherein the other signal comprises --

MAILING ADDRESS OF SENDER (Please do not use Customer Number below):
Akerman LLP / Sonos, Inc.
777 S. Flagler Drive, Suite 1100 West Tower
West Palm Beach FL 33401

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	PLAYBACK DEVICE PAIRING
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0401-CON1019A (0383573

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
CERTIFICATE OF CORRECTION	1811	1	160	160

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**160**

Electronic Acknowledgement Receipt	
EFS ID:	43198633
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	PLAYBACK DEVICE PAIRING
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A (0383573
Receipt Date:	08-JUL-2021
Filing Date:	31-OCT-2019
Time Stamp:	13:29:34
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$160
RAM confirmation Number	E202178D29573323
Deposit Account	500951
Authorized User	Jeffrey Armstrong
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	11-0401-CON1019A_Request_for_Certificate_of_Correction_070821.PDF	97524 37b09f381df649d3237484ef5cb166337819a22f	no	2
Warnings:					
Information:					
2	Request for Certificate of Correction	11-0401-CON1019A_SB44_070821.PDF	68343 df90ab827197e191d0d486ec202f34a193472a52	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30435 89691efbb27385b182f4118e12f23a7b679e6d95	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	196302		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	03/30/2021	10966025	11-0401-CON1019A /15-1432	7387

107361 7590 03/10/2021

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Christopher Kallai, Santa Barbara, CA;
Sonos, Inc., Santa Barbara, CA;
Michael Darrell Andrew Ericson, Santa Barbara, CA;
Robert A. Lambourne, Santa Barbara, CA;
Robert Reimann, Santa Barbara, CA;
Mark Triplett, St. Charles, IL;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 02/23/2021

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
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Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
02/23/2021	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Response to Rule 312 Communication	Application No.	Applicant(s)	
	16/670,109	Kallai et al.	
	Examiner	Art Unit	AIA (FITF) Status
	PAUL C MCCORD	2654	No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1. ☑ The amendment filed on 16 February 2021 under 37 CFR 1.312 has been considered, and has been:
   a) ☑ entered.
   b) ☐ entered as directed to matters of form not affecting the scope of the invention.
   c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
      Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.
   d) ☐ disapproved. See explanation below.
   e) ☐ entered in part. See explanation below.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	None				

If you wish to add additional U.S. Patent citation information please click the Add button. Add

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	None				

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	None						

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NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	Sonos, Inc. v. Google LLC, Complainant Sonos, Inc.'s Pre-Hearing Brief [Redacted 29 January 2021] dated 22 January 2021, 513 pages.	
	2	Sonos, Inc. v. Google LLC, Direct Witness Statement of Kevin Jeffay, PH.D. [Redacted 28 January 2021] dated 18 December 2020, 282 pages.	
	3	Sonos, Inc. v. Google LLC, Rebuttal Expert Report of Kevin C. Almeroth [Redacted 29 January 2021] dated 13 November 2020, 547 pages.	
	4	Sonos, Inc. v. Google LLC, Rebuttal Witness Statement of Kevin C. Almeroth [Redacted 29 January 2021] dated 8 January 2021, 735 pages.	
	5	Sonos, Inc. v. Google LLC, Respondent Google's Pre-Trial Brief [Redacted 29 January 2021] dated 22 January 2021, 516 pages.	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/PAUL C MCCORD/ 02/18/2021	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2021-02-11
Name/Print	Brandon J. Kennedy	Registration Number	67,894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

CLAIM AMENDMENTS

1. (Previously Presented) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is not paired with the one or more other playback devices, and (iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is paired with the one or more other playback devices.

2. (Previously Presented) The playback device of claim 1, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Canceled)

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback

device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii)

transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the .

other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from [[the]] one or more speaker drivers; and

after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers.

18. (Previously Presented) The method of claim 17, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based

on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from [[the]] one or more speaker drivers; and

after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers.

20. (Previously Presented) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

21. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

22. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

23. (Previously Presented). The tangible, non-transitory computer-readable media of claim 19, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker

drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

24. (Previously Presented) The tangible, non-transitory computer-readable media of claim 23, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)
(MBHB 15-1432-US-CON5)

In the Application of:	)	
	)	
Christopher Kallai, et al.	)	Examiner: MCCORD, PAUL
	)	
Application No.: 16/670,109	)	Group Art Unit: 2654
	)	
Filed: October 31, 2019	)	Confirmation No. 7387
	)	
Title: Playback Device Pairing	)	
	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT UNDER 37 C.F.R. § 1.312

Please enter the present amendment pursuant to 37 CFR § 1.312.

AMENDMENTS TO THE CLAIMS begin on page 2.

REMARKS begin on page 10.

Please charge any underpayment of fees or credit any overpayment of fees in connection with the prosecution of the above-captioned application to Deposit Account 13-2490.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)
(MBHB 15-1432-US-CON5)

In the Application of:	)	
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Christopher Kallai, et al.	)	Examiner: MCCORD, PAUL
	)	
Application No.: 16/670,109	)	Group Art Unit: 2654
	)	
Filed: October 31, 2019	)	Confirmation No. 7387
	)	
Title: Playback Device Pairing	)	
	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPLICANT'S COMMENT ON EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

Applicant acknowledges the Examiner's Statement of Reasons for Allowance appearing in the Notice of Allowance in the above-referenced patent application. Applicant agrees that the claimed subject matter is patentable. However, Applicant takes no position regarding the Reasons for Allowance presented by the Examiner other than the positions Applicant may have previously taken during prosecution. Therefore, the Examiner's Reasons for Allowance should not be attributed to Applicant as an indication of the basis for Applicant's belief that the claims are patentable, or as an indication of Applicant's understanding of the cited references or the relevance of the cited references to the claims. In addition, Applicant notes that the Examiner's description of the claims should not be interpreted as altering the scope of the claims, which is defined by the language of the claims themselves. Furthermore, Applicant respectfully asserts that there may also

be additional reasons for patentability of the claimed subject matter not explicitly stated in this record and Applicant does not waive its rights to such arguments by not further addressing such reasons herein.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: February 16, 2021 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	PLAYBACK DEVICE PAIRING
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	1200	1200

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1200**

Electronic Acknowledgement Receipt	
EFS ID:	41939381
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	PLAYBACK DEVICE PAIRING
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	16-FEB-2021
Filing Date:	31-OCT-2019
Time Stamp:	22:32:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1200
RAM confirmation Number	E20212FM32453139
Deposit Account	132490
Authorized User	Jeffrey Armstrong
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	11-0401-CON1019A_Issue_Fee_transmittal.pdf	1635199 cc034eedb6053cba726b2dcc9239114f555b0f57	no	1
Warnings:					
Information:					
2		11-0401-CON1019A_312_Amendment.pdf	113794 c9e9e2d4486c1674a0fe0eb3b8210f4bc9a64439	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	10	10
	Claims	2	9
	Amendment after Notice of Allowance (Rule 312)	1	1

Warnings:					
Information:					
3	Miscellaneous Incoming Letter	11-0401-CON1019A_Comment.pdf	82337 d2c09aeb1c521fdd3bbdfc946620c34d22b1c659	no	2
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30375 44f3da7c195e6b14d2ff61a63317e5443a27425a	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1861705		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

107361 7590 01/13/2021
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

TITLE OF INVENTION: PLAYBACK DEVICE PAIRING

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1200	$0.00	$0.00	$1200	04/13/2021

EXAMINER	ART UNIT	CLASS-SUBCLASS
MCCORD, PAUL C	2654	700-094000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Sonos, Inc.

(B) RESIDENCE: (CITY and STATE OR COUNTRY): Santa Barbara, CA

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 13-2490

5. **Change in Entity Status** (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Jeffrey P. Armstrong/ Date February 16, 2021

Typed or printed name Jeffrey P. Armstrong Registration No. 54,967

REMARKS

Claims 1-3 and 5-25 are pending; claims 1, 17, and 19 are independent. Applicant has amended claims 17 and 19 to provide antecedent bases for the claim terms. No new matter has been added. Because the amendments are ministerial in nature and/or do not change the scope of the allowed claims, Applicant requests that the Office enter the amendments pursuant to 37 C.F.R. § 1.312. If further dialog would advance consideration and entry of the present amendments, the Office is invited to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: February 16, 2021 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

CLAIM AMENDMENTS

1. (Previously Presented) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is not paired with the one or more other playback devices, and (iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is paired with the one or more other playback devices.

2. (Previously Presented) The playback device of claim 1, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Canceled)

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback

device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii)

transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the .

other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from [[the]] one or more speaker drivers; and

after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers.

18. (Previously Presented) The method of claim 17, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based

on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from [[the]] one or more speaker drivers; and

after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers.

20. (Previously Presented) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

21. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

22. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

23. (Previously Presented). The tangible, non-transitory computer-readable media of claim 19, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker

drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

24. (Previously Presented) The tangible, non-transitory computer-readable media of claim 23, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	Sonos, Inc. v. Google LLC, Complainant Sonos, Inc.'s Pre-Hearing Brief [Redacted 29 January 2021] dated 22 January 2021, 513 pages.	
	2	Sonos, Inc. v. Google LLC, Direct Witness Statement of Kevin Jeffay, PH.D. [Redacted 28 January 2021] dated 18 December 2020, 282 pages.	
	3	Sonos, Inc. v. Google LLC, Rebuttal Expert Report of Kevin C. Almeroth [Redacted 29 January 2021] dated 13 November 2020, 547 pages.	
	4	Sonos, Inc. v. Google LLC, Rebuttal Witness Statement of Kevin C. Almeroth [Redacted 29 January 2021] dated 8 January 2021, 735 pages.	
	5	Sonos, Inc. v. Google LLC, Respondent Google's Pre-Trial Brief [Redacted 29 January 2021] dated 22 January 2021, 516 pages.	

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2021-02-11
Name/Print	Brandon J. Kennedy	Registration Number	67,894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: February 11, 2021

By: /Brandon J. Kennedy/
Brandon J. Kennedy
Reg. No. 67,894
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9315
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Electronic Patent Application Fee Transmittal					
Application Number:	16670109				
Filing Date:	31-Oct-2019				
Title of Invention:	PLAYBACK DEVICE PAIRING				
First Named Inventor/Applicant Name:	Christopher Kallai				
Filer:	Brandon Jacob Kennedy/Jaden Knosher				
Attorney Docket Number:	11-0401-CON1019A /15-1432				
Filed as Large Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		**Fee Code**	**Quantity**	**Amount**	**Sub-Total in USD($)**
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	260	260
		Total in USD ($)		**260**

Electronic Acknowledgement Receipt	
EFS ID:	41911307
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	PLAYBACK DEVICE PAIRING
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	12-FEB-2021
Filing Date:	31-OCT-2019
Time Stamp:	15:16:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$260
RAM confirmation Number	E20212BF16421325
Deposit Account	506632
Authorized User	Brandon Kennedy
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20210211152648.pdf	1053392 eeb2daeec6ac270ead6b813ad7f53600ec8a368a	no	4
Warnings:					
Information:					
2	Transmittal Letter	IDS_Transmittal.pdf	83394 d89b0190353c9bfa3ed26331c6cbb3a09fd8d51c	no	1
Warnings:					
Information:					
3	Non Patent Literature	337-TA-1191_2021-01-22_Sonos_Pre-Hearing_Brief-redacted_513pgs.pdf	1927734 26e6ce8595ed1829f210cbc442e90c5e2039e545	no	513
Warnings:					
Information:					
4	Non Patent Literature	Jeffay_Witness_Statement_Redacted_12-18-20_282pgs.pdf	13567196 be6795157933fb29e1fef753c02fcc090f85ff09	no	282
Warnings:					
Information:					
5	Non Patent Literature	Almeroth_Rebuttal_Expert_Report-redacted_547pgs.pdf	18853977 c8ddad60b16d74a7353e08e1b3e18217f7493257	no	547
Warnings:					
Information:					
6	Non Patent Literature	CX-0014C-Almeroth_Rebuttal_Witness_Statement-redacted_735pgs.pdf	9493577 045630c1f32733fcd0ece07a3fa2bb44ed923f75	no	735
Warnings:					
Information:					

7	Non Patent Literature	REDACTED_2021-01-22_Respondent_Google_Pre-Hearing_Brief_516pgs.pdf	4025954 ae90e00cd70ed374d0f69842b6b0ddced06f7c57	no	516
Warnings:					
Information:					
8	Fee Worksheet (SB06)	fee-info.pdf	30689 4ccc5e92a98a96dfca088787f8b13af162bf12cd	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	49035913		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

107361 7590 01/13/2021

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER
MCCORD, PAUL C

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 01/13/2021

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

TITLE OF INVENTION: PLAYBACK DEVICE PAIRING

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1200	$0.00	$0.00	$1200	04/13/2021

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

107361 7590 01/13/2021
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

TITLE OF INVENTION: PLAYBACK DEVICE PAIRING

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1200	$0.00	$0.00	$1200	04/13/2021

EXAMINER	ART UNIT	CLASS-SUBCLASS
MCCORD, PAUL C	2654	700-094000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1_____
2_____
3_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑Issue Fee ❑Publication Fee (if required) ❑Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 01/13/2021

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 01/13/2021

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 16/670,109	Applicant(s) Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to claims filed 12/4/20.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are 1-24 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☑ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☐ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: The prior art does not reasonably teach selectively grouping a plurality of network connectable audio output devices comprising; within a user interface operable for selecting each/any of the audio output devices to operate within a playback zone in a particular location, the zone comprising a user directed grouping of named individual audio output devices configurable for synchronous playback of a selected media; activating the selected one or more individual audio output devices of the zone to perform synchronous delivery of the media; the media delivered by the one or more individual audio output devices derived from a first, second, etc. source based upon audio data and/or audio configuration data and wherein the particular selection of a zone or group of zones additionally maps channels of the audio data to particular audio output devices in a manner which directs playback of one or more channels of audio data through particular instances of one or more zones and where the mapped channel playback is configured based on the audio data and/or audio configuration data determined by the playback device configuration and additionally operable to select any of a plurality of playback parameters including equalization curves, gain, etc. for each/any audio playback device(s) in the one or more zones.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL C MCCORD whose telephone number is (571)270-3701. The examiner can normally be reached on 730-630 M-F.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on 5712727848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-my.uspto.gov/pair/PrivatePair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Examiner-Initiated Interview Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.		
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (First Inventor to File) Status** No	**Page** 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
PAUL C MCCORD	Primary Examiner	Telephonic
JEFFREY ARMSTRONG	Attorney of Record	

Date of Interview: 07 January 2021

Issues Discussed:

35 U.S.C. 103

Discussed distinctions between the instant independent claims and the references filed in the 12/2/20 IDS. Examiner indicated that the claims as field 12/4/20 are allowable

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC						
Symbol					Type	Version
H04R	/	3	/	12	F	2013-01-01
G06F	/	3	/	165	I	2013-01-01
H04R	/	27	/	00	I	2013-01-01
H04S	/	7	/	30	I	2013-01-01
H03G	/	3	/	20	I	2013-01-01
H04R	/	5	/	04	I	2013-01-01
H03G	/	3	/	3005	I	2013-01-01
H03G	/	5	/	165	I	2013-01-01
H04R	/	2420	/	01	A	2013-01-01
H04R	/	2227	/	005	A	2013-01-01
H04R	/	2420	/	07	A	2013-01-01
H04R	/	2227	/	003	A	2013-01-01
H04S	/	2400	/	01	A	2013-01-01

CPC Combination Sets							
Symbol					Type	Set	Ranking	Version
	/		/					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	24	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	07 January 2021	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	9

U.S. Patent and Trademark Office — Part of Paper No.: 20210107

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	17	/	00

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
700	94

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE (Assistant Examiner) (Date)	**Total Claims Allowed:** 24	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654 (Primary Examiner) 07 January 2021 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 9

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

☑ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		10		19										
	2		11		20										
	3		12		21										
	4		13		22										
	5		14		23										
	6		15		24										
	7		16												
	8		17												
	9		18												

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	24	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	07 January 2021	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	9

U.S. Patent and Trademark Office — Part of Paper No.: 20210107

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04R3/12	01/07/2021	pm
G06F3/165	01/07/2021	pm
H03G3/20,3005	01/07/2021	pm
H03G5/165	01/07/2021	pm
H04R5/04	01/07/2021	pm
H04R27/00	01/07/2021	pm
H04S7/30	01/07/2021	pm
H04R2227/003,005	01/07/2021	pm
H04R2420/01,07	01/07/2021	pm
H04S2400/01	01/07/2021	pm

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
700	94	01/07/2021	pm

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	**Date**	**Examiner**

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

East text search H04R3/12	10/23/2020	pm
East text search G06F3/165	10/23/2020	pm
East text search H03G3/20,3005	10/23/2020	pm
East text search H03G5/165	10/23/2020	pm
East text search H04R5/04	10/23/2020	pm
East text search H04R27/00	10/23/2020	pm
East text search H04S7/30	10/23/2020	pm
East text search H04R2227/003,005	10/23/2020	pm
East text search H04R2420/01,07	10/23/2020	pm
East text search H04S2400/01	10/23/2020	pm
East text search 700/94	10/23/2020	pm
Inventor, Assignee name search	10/23/2020	pm
East text search CPC and USPC datasets	10/23/2020	pm
Google patent search	10/23/2020	pm
IP.com patent search	10/23/2020	pm
Claims, priority consultation Dan Swerdlow	10/23/2020	pm
East text search H04R3/12	01/07/2021	pm
East text search G06F3/165	01/07/2021	pm
East text search H03G3/20,3005	01/07/2021	pm
East text search H03G5/165	01/07/2021	pm
East text search H04R5/04	01/07/2021	pm
East text search H04R27/00	01/07/2021	pm
East text search H04S7/30	01/07/2021	pm
East text search H04R2227/003,005	01/07/2021	pm
East text search H04R2420/01,07	01/07/2021	pm
East text search H04S2400/01	01/07/2021	pm
East text search 700/94	01/07/2021	pm
East text search CPC and USPC datasets	01/07/2021	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
please see above class search		01/07/2021	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	3	"20070047481"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:14
S2	306	"7136709" "20050254505" "20060221260" "5909183" "20030009567"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:15
S3	2	".20060221260"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:16
S4	2	"20060221260"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:16
S5	206	"6604023" "5924486"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:17
S6	509	S2 S5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:17

S7	799	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:18
S8	306	"7136709" "20050254505" "20060221260" "5909183" "20030009567"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:19
S9	206	"6604023" "5924486"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:19
S10	509	S8 S9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:19
S11	0	S10 AND S7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:19
S12	10	("7136709" "20050254505" "20060221260" "5909183" "20030009567").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:19
S13	772	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:21

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S15	4	("6604023" "5924486").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:24
S16	7	("20070094035" "20030135374" "5222189").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 10:47
S17	183	log$3compand$6 (log logar$6) near2 compand$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 11:34
S18	3	S17 and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 11:34
S19	11	S17 and 704/500-502.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 11:35
S20	108	("8234395" | "20030020763" | "8239559" | "20020002039" | "20040117044" | "20070288610" | "20080077261" | "6778869" | "7539551" | "20050021470" | "20060041616" | "20080025535" | "8189824" | "20040223622" | "20050131558" | "7558224" | "7761176" | "7962482" | "20020124097" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/02 09:49

		"20040131192" | "20030167335" | "20060149402" | "20050289224" | "20070142022" | "7668990" | "20040015252" | "20030177889" | "20050002535" | "20020003548" | "7218708" | "8045952" | "20040010727" | "20080045140" | "7187947" | "7742832" | "7805210" | "8290603" | "20070142944" | "20080144861" | "5182552" | "6631410" | "7130608" | "20040225389" | "20080152165" | "7571014" | "7643894" | "20020072816" | "5946343" | "20050144284" | "20070189544").PN.				
S21	7	"892230".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/02 09:51
S22	2	"20130253679"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/02 09:51
S23	19	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5 and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:57
S24	108	("8234395" | "20030020763" | "8239559" | "20020002039" | "20040117044" | "20070288610" | "20080077261" | "6778869" | "7539551" | "20050021470" | "20060041616" | "20080025535" | "8189824" | "20040223622" | "20050131558" | "7558224" | "7761176" | "7962482" | "20020124097" | "20040131192" | "20030167335" | "20060149402" | "20050289224" | "20070142022" | "7668990" | "20040015252" | "20030177889" | "20050002535" | "20020003548" | "7218708" | "8045952" | "20040010727" | "20080045140" | "7187947" | "7742832" | "7805210" | "8290603" | "20070142944" | "20080144861" | "5182552" | "6631410" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58

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S25	108	S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58
S26	1	S23 and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58
S27	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5 and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58
S28	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58
S29	15	"1098476" "20100299639"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:05
S30	12	"1098476"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:06
S31	6	("6587127" | "20100299639" | "20120266231").PN.	US-PGPUB; USPAT; EPO;	OR	ON	2014/05/03 10:06

			JPO; DERWENT			
S32	2	"20130174204"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:07
S33	10	("20090228919" | "20120117586" | "20120304233" | "20080134256" | "20030198257").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:09
S34	4	"8421746"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:10
S35	770	"6400996"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:18
S36	3	"6400996".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:18
S37	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) And S35	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:18
S38	3	"20080066094"	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 10:19

			DERWENT			
S39	3	"20100299639"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:21
S40	3	"20110004716"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:21
S41	3	"20100052843"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:22
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S43	5	("6163510" "6310839" "6377519" "6414914").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:37
S44	175	plural near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:42
S45	0	plural near3 play$5 near4 (media song title) and S35	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 10:42

			DERWENT			
S46	0	plural near3 play$5 near4 (media song title) and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:42
S47	0	plural near3 play$5 near4 (media song title) and S29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S48	0	plural$4 near3 play$5 near4 (media song title) and S29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S49	3,523	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S50	2	S49 and S35	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S51	4	S49 and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S52	6	S50 S51	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 10:43

			DERWENT			
S53	4,467	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:51
S54	13	S53 and S35	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:00
S55	3	S53 and S24	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:00
S56	16	S54 S55	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:00
S57	0	S54 and S55	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:06
S58	2	S52 and S56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:06
S59	7	"892230".ap.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 11:22

			DERWENT			
S60	771	g06f17/30772.cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:23
S61	186	g06f17/30772.cpc. and (S49 S53)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:23
S62	35	g06f17/30772.cpc. and (S49 and S53)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:23
S63	89	wijeratne.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:47
S64	2	wijeratne.in. and mall	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:48
S65	23	("7302468").URPN.	USPAT	OR	ON	2014/05/03 11:48
S66	18	("7302468").URPN. and (zone scene config$8)	USPAT	OR	ON	2014/05/03 11:49
S67	7	omnidrive$4	USPAT	OR	ON	2014/05/03 11:55
S68	10	omnidrive$4	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 11:55

			DERWENT			
S69	0	rane with hal'	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:59
S70	0	rane with hal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:59
S71	16	rane with hal$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 11:59
S72	0	rane with driverack	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:00
S73	0	rane with driverack$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:00
S74	0	rane and driverack$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:00
S75	995	rane and hal$4	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/05/03 12:00

			DERWENT			
S76	87	rane and hal$4 and audio	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:00
S77	0	rane same hal$4 and audio	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:01
S78	0	rane.as. and (drag adj net$4 drag$3net$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:05
S79	21	(US-20070047481-$ or US-20050254505-$ or US-20080077261-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020002039-$).did. or (US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-7626952-$ or US-6889207-$ or US-7302468-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2014/05/03 12:16
S80	20	S79 and (zone group$4 scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:16
S81	10	S79 and (zone group$4 scene config$9) with display$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:17
S82	14	S79 and (zone group$4 scene config$9) with (manag$6 display$6)	US-PGPUB;	OR	ON	2014/05/03 12:18

			USPAT; EPO; JPO; DERWENT			
S83	5	S79 and (discover$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:23
S84	183	log$3compand$6 (log logar$6) near2 compand$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:08
S85	3	S84 and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:08
S86	0	S85 and 704/500-502.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:08
S87	243	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:08
S88	132,883	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:09

		G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR				

		H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S89	21	(US-20070047481-$ or US-20050254505-$ or US-20080077261-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020002039-$).did. or (US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-7626952-$ or US-6889207-$ or US-7302468-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2014/05/16 12:28
S90	5	S89 and (discover$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:28
S107	774	"6400996"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 14:31
S108	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) And S107	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 14:31
S109	4,491	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 14:33

S160	21	(US-20070047481-$ or US-20050254505-$ or US-20080077261-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020002039-$).did. or (US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-7626952-$ or US-6889207-$ or US-7302468-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2014/05/19 09:19
S161	1	S160 and complement	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/19 09:20
S162	2	S160 and complement$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/19 09:20
S170	30	("20030167335" | "20030177889" | "20040117044" | "20040225389" | "20050002535" | "20050021470" | "20050144284" | "20060041616" | "20070189544" | "20070288610" | "20080025535" | "20080152165" | "7761176" | "7962482" | "8189824").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/19 10:43
S171	25	("20020072816" | "20040223622" | "20050131558" | "20080045140" | "7539551" | "7558224" | "7742832" | "7805210" | "8239559").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/19 10:44
S172	2	"20120263318"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 11:12
S188	14	"8275307" "20020098878" "8639370" "7966085"	US-PGPUB; USPAT; EPO;	OR	ON	2014/07/15 13:19

			JPO; DERWENT			
S189	8	("8275307" "20020098878" "8639370" "7966085").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:22
S190	3,865	(g06f3/162 g06f3/165 h04b1/20 h04b1/202 h04b1/205 h04b1/207 h04h20/106 h04r2420/01 h04r2420/03 h04r2420/05 h04r5/04)"cpc."	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:25
S191	4,353	(g06f3/162 g06f3/165 h04b1/20 h04b1/202 h04b1/205 h04b1/207 h04h20/106 h04r2420/01 h04r2420/03 h04r2420/05 h04r5/04).cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:25
S192	1,423,988	detect$6 near3 signal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:26
S193	33,531	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:26
S194	366	S191 and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:26
S195	2	S191 and 700/94.ccls. and S193	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/15 13:26

			DERWENT			
S196	104	S191 and S193	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:26
S197	10	"6678014"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:32
S207	2	"272833".ap. and web$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:43
S208	167	chung.in. near2 chul	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:47
S209	33	chung.in. near2 chul and internet	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:47
S210	9	chung.in. near2 chul and internet and mondo	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:47
S211	156,663	web$6 with (zone scene config$9)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/16 10:48

			DERWENT			
S212	359	web$6 with (zone scene config$9) and wireless near4 $5speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:48
S213	39	web$6 with (zone scene config$9) and wireless near4 $5speaker with (zone scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:51
S214	0	"783718".ap. and web$6 with (zone scene config$9) and wireless near4 $5speaker with (zone scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:52
S215	0	"783718".ap. and (server web$6) with (zone scene config$9) and wireless near4 $5speaker with (zone scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:53
S216	2	"353805".ap. and (server web$6) with (zone scene config$9) and wireless near4 $5speaker with (zone scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/16 10:53
S217	71	("20020078161" | "20030002689" | "20030161479" | "20050147261" | "20070003067" | "20070142944" | "20080002839" | "20080144864" | "20080175411" | "20090024662" | "20110044476" | "20110299696" | "20130022221" | "5218710" | "5553147" | "5668884" | "5673323" | "5946343" | "6704421" | "6778869" | "6916980" | "6931134" | "7171010" | "7571014" | "7643894" | "7792311" | "8045952" | "8103009" | "8234395").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/17 10:33

S218	2	"20080162668"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/17 10:39
S219	3	"20060193482"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/18 09:21
S220	3	"20050281138"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 09:29
S221	4	"089167".ap. and (tangible medium)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 09:53
S222	2	"20040239816"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 10:50
S223	21	(US-20070047481-$ or US-20050254505-$ or US-20080077261-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020002039-$).did. or (US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-7626952-$ or US-6889207-$ or US-7302468-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2014/07/22 12:07
S224	20	S223 and (zone group$4 scene config$9)	US-PGPUB; USPAT; EPO;	OR	ON	2014/07/22 12:07

			JPO; DERWENT			
S225	20	S224	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:07
S226	2	"20060029005" and (zone group$4 scene config$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:07
S227	2	"20060029005" and state near3 chang$3 near6 tv	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:08
S228	0	"20060029005" and state near3 chang$3 near6 signal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:08
S229	2	"20060029005" and state near3 chang$3 with (tv audio signal output)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:08
S230	2	"20060029005" and state near3 chang$3 with (tv audio signal output input)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:09
S231	2	"20060029005" and state near3 chang$3 with (audio signal output input)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/22 12:09

			DERWENT			
S232	171	700/94.ccls.and state near3 chang$3 with (audio signal output input)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:40
S233	171	700/94.ccls. and state near3 chang$3 with (audio signal output input)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:40
S234	114	700/94.ccls. and state near3 chang$3 with (audio signal output input) and $5speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:41
S235	5	700/94.ccls. and state near3 chang$3 with (audio signal output input) and $5speaker with network	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/22 12:41
S329	3	"20040147224"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 13:02
S330	3	"20080092204"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 13:03
S331	9	"853790".ap. and (channel multi$3channel multi$4)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/06 13:10

			DERWENT			
S332	1	"853790".ap. and (surround$5 "5.1")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 13:11
S333	3	"20040147224"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:01
S334	3	"20080092204"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:01
S335	6	S333 S334	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:01
S336	2	S335 and $7channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:05
S337	15	("7483538" | "7853341" | "8103009").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:05
S338	36	("20010042107" | "20020022453" | "20020026442" | "20030157951" | "20040024478" | "20130253679" | "5923902" | "6256554" | "6404811" | "6522886" | "6611537" | "6757517" |	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/06 17:06

		"7130616" | "7143939" | "7236773" | "7657910" | "8014423" | "8843228").PN.	DERWENT			
S339	4	("20130293345" | "8483853").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
S340	15	("20080066120" | "20080162668" | "20090097672" | "7302468" | "7626952" | "7817960").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
S341	2	("20050289244").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
S342	60	("20030167335" | "20030177889" | "20030198257" | "20040117044" | "20040225389" | "20050002535" | "20050021470" | "20050144284" | "20050254505" | "20060041616" | "20060149402" | "20070189544" | "20070288610" | "20080025535" | "20080066094" | "20090228919" | "6587127" | "6604023" | "7761176" | "7849181" | "7962482" | "8189824" | "8700730").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
S343	48	(S337 S338 S339 S340 S341 S342) and $7channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
S344	12	(S337 S338 S339 S340 S341 S342) and $7channel same config$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:07
S345	2	S335 and $7channel same config$9	US-PGPUB;	OR	ON	2015/02/06 17:07

			USPAT; EPO; JPO; DERWENT			
S346	3	S335 and config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:07
S347	12	("20020133764" | "20040160928" | "20050141469" | "20050169193" | "20050288805" | "20060173978" | "20060174116" | "20070192833" | "6466832" | "6954641").PN. OR ("7983615").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/02/06 17:08
S348	4	S347 and $7channel same config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:08
S349	41	("20020072816" | "20030103088" | "20040088731" | "20040183756" | "20050177256" | "20060205349" | "20070147351" | "20070162872" | "20080126936" | "20080256341" | "20090307658" | "20100284389" | "20100292818" | "20100293264" | "20100318911" | "20100318917" | "5182552" | "5406634" | "5475835" | "5519641" | "5646602" | "5687334" | "5793366" | "5818948" | "5838384" | "6421692" | "6433800" | "6700592" | "6963784" | "7136709" | "7234115" | "7571014" | "7574723" | "7742606" | "7944922" | "7983615" | "7987294" | "8028038" | "8028323" | "8086575" | "8161400").PN. OR ("8423893").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/02/06 17:09
S350	18	S349 and (surround "5.1" $7channel) same config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:09

S351	8	sonos.as. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:22
S352	8	sonos.as. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:22
S353	17	(US-20070047481-$ or US-20050254505-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020098878-$ or US-20050100174-$ or US-20060229752-$ or US-20100284389-$ or US-20080162668-$ or US-20060029005-$ or US-20080092204-$ or US-20050177256-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2015/02/06 17:41
S354	20	(US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-6889207-$ or US-7302468-$ or US-8275307-$ or US-8639370-$ or US-7966085-$ or US-8086287-$ or US-6678014-$ or US-8423893-$ or US-7987294-$ or US-7742606-$ or US-5519641-$ or US-5406634-$ or US-8189824-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT; EPO	OR	ON	2015/02/06 17:41
S355	37	S353 S354	US-PGPUB; USPAT; EPO	OR	ON	2015/02/06 17:41
S356	23	S355 and request$6	US-PGPUB; USPAT; EPO	OR	ON	2015/02/06 17:42
S357	4	"7742606" and channel near9 count$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:46

S358	4	"7742606" and channel near9 count$5 and (count$4 surround "5.1" multi$3channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:46
S359	2	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:49
S360	2	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:49
S361	0	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6 and speaker with (wireless network$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:50
S362	0	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6 and speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:50
S363	2	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6 and $4speaker same (wireless network$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:50
S364	2	"20050239397" and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:53

S365	2	"20050239397" and pem same $5speak$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:55
S366	1	shdema.in. and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:56
S367	1	shdema.in. and request$6 and (communication near3 interface "150" "180" "204" "210" "320")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:59
S368	2	shdema.in. and audio near3 manag$8 same $5speak$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:00
S369	2	shdema.in. and audio near3 manag$8 with $5speak$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:00
S370	3	"7539551" and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:04
S371	3,355	(network$6 wireless$4) near6 $4speaker.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:25

S372	69	(network$6 wireless$4) near6 $4speaker.ab. same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:25
S373	0	S372 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:25
S374	15	S371 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:25
S375	5	bryce.in. and $4speaker and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:28
S376	13	bryce.in. and $4speaker and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 18:28
S382	860	(h04r2227/003 h04r2227/005 h04s5/005).cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:06
S383	91	S382 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) and request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:07

S384	26	S382 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:07
S385	33	S382 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:08
S386	0	holladay.in. and jbl.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:11
S387	9	holladay.in. and harman.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:11
S388	0	reverberation and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:13
S389	754	(set$3top set adj top) same channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:17
S390	0	"186991".ap. and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:17

S391	0	"186991".ap. and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:18
S392	6	"186991".ap. and (count$4 surround "5.1" multi$3channel $6channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:18
S393	0	"186991".ap. and (count$4 surround "5.1" multi$3channel $6channel) and reverb	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:18
S394	1	"186991".ap. and (count$4 surround "5.1" multi$3channel $6channel) and reverb$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:18
S395	585	(set$3top set adj top) same $6channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:20
S396	337	(set$3top set adj top) same $6channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6 and (user adj interface gui)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:20
S397	22	(set$3top set adj top) same $6channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6 and (user adj interface gui) and (wireless$4 network$6) near5 $5speak$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:21

S398	3	"20080242222"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:42
S399	10	"853790".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:49
S400	209	("20030020763" | "7571014" | "7742832" | "7761176" | "20040024478" | "20020124097" | "7539551" | "20040117044" | "20050002535" | "20050144284" | "20070288610" | "20080066094" | "8700730" | "6522886" | "7143939" | "20070142022" | "6778869" | "7643894" | "8234395" | "20020072816" | "20030167335" | "20060149402" | "7626952" | "7130616" | "20020124097" | "20040131192" | "7218708" | "20040223622" | "7805210" | "8239559" | "20030177889" | "20080025535" | "20090097672" | "20020026442" | "5923902" | "7853341" | "8103009" | "20040015252" | "20020002039" | "20060041616" | "20050289244" | "20020022453" | "20030157951" | "6256554" | "6611537" | "7236773" | "20040010727" | "7187947" | "7668990" | "8045952" | "8290603" | "7558224" | "20080077261" | "20080152165" | "20040225389" | "20050021470" | "20050254505" | "20090228919" | "7849181" | "7962482" | "8189824" | "20080162668" | "20130293345" | "20010042107" | "6404811" | "7657910" | "8014423" | "8843228" | "7483538" | "20070142944" | "20080144861" | "5182552" | "6631410" | "7130608" | "20050131558" | "20070189544" | "6604023" | "20020003548" | "20050289224" | "5946343" | "20070142022" | "20080045140" | "20030198257" | "6587127" | "20080066120" | "7302468" | "7817960" | "8483853" | "20130253679" | "6757517").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:52

S403	13	"299847".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 15:50
S404	870	(h04r2227/003 h04r2227/005 h04s5/005).cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:23
S405	26	S404 and channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel) same request$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:23
S406	129,137	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24

		G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S407	3,877	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24
S408	5,124	second near3 play$5 near4 (media song title)	US-PGPUB;	OR	ON	2015/02/21 16:24

			USPAT; EPO; JPO; DERWENT			
S409	39	g06f17/30772.cpc. and (S407 and S408)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24
S410	34,847	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:58
S411	881	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:58
S412	129,137	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:58

		H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S413	659	S411 and S412	US-PGPUB; USPAT; EPO;	OR	ON	2015/02/21 16:59

			JPO; DERWENT			
S414	1	S410 and S413	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:59
S415	865	"6400996"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 17:01
S416	25	zone with play$4 and (sync synchron$8) And S415	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 17:01
S417	3	"20070016427"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 17:52
S418	3	"20030147538"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 08:40
S419	64	"7,188,186"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 09:14
S420	2	"7,188,186".pn.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/23 09:14

			DERWENT			
S421	1	"395900".ap. and light near3 effect$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 09:19
S422	13	"299847".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 09:48
S423	2	"20140286507"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:01
S424	210	("20020072816" | "20050131558" | "20080144861" | "7742832" | "8234395" | "20130293345" | "20040117044" | "20050144284" | "20070288610" | "20080045140" | "20080066094" | "20080077261" | "6778869" | "7130608" | "8700730" | "6522886" | "6611537" | "7143939" | "20020002039" | "20030167335" | "20060149402" | "7558224" | "7571014" | "7626952" | "8483853" | "7130616" | "20030177889" | "20080025535" | "6631410" | "7187947" | "7761176" | "20090097672" | "5923902" | "7853341" | "8103009" | "20030020763" | "20040223622" | "20050289224" | "20050289244" | "20060041616" | "20070142022" | "20080152165" | "5946343" | "7668990" | "8788080" | "20020022453" | "20030157951" | "20040024478" | "6256554" | "7236773" | "20020003548" | "20040010727" | "20040225389" | "20050021470" | "20050254505" | "20090228919" | "5182552" | "7218708" | "7805210" | "7849181" | "7962482" | "8045952" | "8189824" | "20080162668" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20070142944" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:06

		"20070189544" | "6604023" | "20020026442" | "20130253679" | "20020124097" | "20030198257" | "20040015252" | "20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517").PN.				
S425	4,500,803	pair$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:06
S426	35	S424 and S425	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:06
S427	20	S424 and (stereo same (mono multi$6channel multi$6 near2 channel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:07
S428	11	S426 and S427	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:07
S429	21	chung.in. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:09
S430	0	chung.in. and mccord.xa.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:09

S431	1	chung.in. and mccord.xp.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:10
S432	1,999	S425 AND ((H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04S7/30 OR G06F3/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:11
S433	1,228	S425 same (stereo same (mono multi$6channel multi$6 near2 channel))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:12
S434	120	S433 AND ((H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04S7/30 OR G06F3/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:12
S435	3	S434 AND ((G06F3/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:14
S436	13	"8483853"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:16
S437	1	chung.in. and mccord.xp. and (eq equaliz$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:17

S438	1	chung.in. and mccord.xp. and (eq equaliz$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:18
S439	1	chung.in. and mccord.xp. and (eq equaliz$9 frequency)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:18
S440	1	chung.in. and mccord.xp. and (eq equaliz$9 select$8 near3 frequency)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:18
S441	1	chung.in. and mccord.xp. and ((determin$6 config$8 select$8) near3 frequency)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:20
S442	943	multi$3channel near5 pair$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:28
S443	74	(select$6 determin$6) near6 multi$3channel near2 pair$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:03
S444	4,366	381/17,77,80,81.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:04

S445	6,163	((H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04S7/30 OR G06F3/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:05
S446	946	S444 and S445	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:05
S447	0	S443 and S446	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:05
S448	2	S443 and (S444 S445)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:05
S449	0	(select$6 determin$6) near6 multi$3channel near2 pair$6 with (play$3back $6speaker)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:05
S450	50	(select$6 determin$6) near6 multi$3channel near2 pair$6 and (audio sound music play$3back $6speaker)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:06
S451	372	select$6 with stereo with (surround "5.1")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:10

S452	15	S446 and S451	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:10
S453	19	("2005/0177256").URPN.	USPAT	OR	ON	2015/02/23 11:12
S454	9	S446 and channel near2 map$6	USPAT	OR	ON	2015/02/23 11:22
S455	26	S446 and channel near2 map$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:22
S456	17	S446 and channel near2 map$6 not S454	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:22
S457	2,475	select$6 near5 channel near2 map$6 not S454	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:27
S458	2	S451 and S457	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:32
S459	0	(select$6 determin$6) near6 multi$3channel near2 pair$6 and (audio sound music play$3back $6speaker) and S457	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:33
S460	0	S443 and S457	US-PGPUB; USPAT;	OR	ON	2015/02/23 11:33

			EPO; JPO; DERWENT			
S461	3	"20040147224"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:34
S462	3	"20080092204"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:34
S463	6	S461 S462	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:34
S464	2	S463 and $7channel same config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:34
S465	1,492	S457 and $7channel same config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:34
S466	894	S465 and (audio sound music play$3back $6speaker)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:35
S467	143	S465 and (audio sound music play$3back $6speaker) near6 config$6	US-PGPUB; USPAT; EPO;	OR	ON	2015/02/23 11:37

			JPO; DERWENT			
S468	2	"20060149402" and network$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 14:13
S469	2	"20060149402" and network$6 and (surround "5.1")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 14:14
S470	2	"20060149402" and network$6 and (surround "5.1") and stereo	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 14:14
S471	16	(US-20040117044-$ or US-20080159545-$ or US-20050177256-$ or US-20040223622-$ or US-20100153097-$ or US-20090232326-$ or US-20070223725-$ or US-20060149402-$).did. or (US-7689305-$ or US-8423893-$ or US-8233635-$ or US-8054987-$ or US-7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$).did.	US-PGPUB; USPAT	OR	ON	2015/02/23 15:04
S472	10	S471 and (mono monaural)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:05
S473	0	shdema.in. and (mono monaural)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:08
S474	210	("20020072816" | "20050131558" | "20080144861" | "7742832" | "8234395" | "20130293345" | "20040117044" |	US-PGPUB; USPAT;	OR	ON	2015/02/23 15:09

		"20050144284" | "20070288610" | "20080045140" | "20080066094" | "20080077261" | "6778869" | "7130608" | "8700730" | "6522886" | "6611537" | "7143939" | "20020002039" | "20030167335" | "20060149402" | "7558224" | "7571014" | "7626952" | "8483853" | "7130616" | "20030177889" | "20080025535" | "6631410" | "7187947" | "7761176" | "20090097672" | "5923902" | "7853341" | "8103009" | "20030020763" | "20040223622" | "20050289224" | "20050289244" | "20060041616" | "20070142022" | "20080152165" | "5946343" | "7668990" | "8788080" | "20020022453" | "20030157951" | "20040024478" | "6256554" | "7236773" | "20020003548" | "20040010727" | "20040225389" | "20050021470" | "20050254505" | "20090228919" | "5182552" | "7218708" | "7805210" | "7849181" | "7962482" | "8045952" | "8189824" | "20080162668" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20070142944" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020124097" | "20030198257" | "20040015252" | "20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517").PN.	EPO; JPO; DERWENT			
S475	2	shdema.in. and S474	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:09
S476	1	shdema.in. and S474 and (eq equaliz$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:09
S477	1	shdema.in. and S474 and (eq equaliz$6) and ("5.1" surround multi$3channel multi$4 near2 channel) same (stereo mono)	US-PGPUB; USPAT; EPO;	OR	ON	2015/02/23 15:10

			JPO; DERWENT			
S478	0	shdema.in. and S474 and (eq equaliz$6) same ("5.1" surround multi$3channel multi$4 near2 channel) same (stereo mono)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:10
S479	1	"20050177256" and (left right) with surround	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:31
S480	1	"20050177256" and (left right) with (stereo surround)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:31
S481	0	"20050177256" and (eq equaliz$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:32
S482	1	"20050177256" and (eq equaliz$8 frequency)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:32
S483	0	"20050177256" and (pass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:32
S484	0	"20050177256" and ($6pass)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/23 15:32

			DERWENT			
S486	0	S471 and ($6pass) with (select$6 config$8 determin$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:33
S487	1	"299847".ap. and consolid$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 16:29
S488	2	"20060149402" and (user control$) near3 interface	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 16:46
S489	16	(US-20040117044-$ or US-20080159545-$ or US-20050177256-$ or US-20040223622-$ or US-20100153097-$ or US-20090232326-$ or US-20070223725-$ or US-20060149402-$).did. or (US-7689305-$ or US-8423893-$ or US-8233635-$ or US-8054987-$ or US-7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$).did.	US-PGPUB; USPAT	OR	ON	2015/02/23 16:54
S490	7	S489 and ($6pass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 16:54
S491	213	n7947.oref. (mpeg$3surround mpeg adj surround).oref.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 17:30
S492	213	$3n7947.oref. (mpeg$3surround mpeg adj surround).oref.	US-PGPUB; USPAT; EPO;	OR	ON	2015/02/23 17:30

			JPO; DERWENT			
S493	39	("20120215530" | "7539551" | "20060062401" | "20080189065" | "20080232603" | "20120114152" | "20080077261" | "5386478" | "20090003613" | "20100260360" | "20060149402" | "20050180582" | "20020154785" | "20030142832" | "20080162668" | "20100272270" | "20060229752" | "20080037674" | "8559655").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 13:40
S494	42	("20120215530" | "7539551" | "20060062401" | "20080189065" | "20080232603" | "20120114152" | "20080077261" | "5386478" | "20090003613" | "20100260360" | "20060149402" | "20050180582" | "20020154785" | "20030142832" | "20080162668" | "20100272270" | "20060229752" | "20080037674" | "8559655").PN. "8320824".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 13:43
S495	3	"8320824".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 13:46
S496	11	"664367".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 13:48
S497	10	"670247".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 13:49
S498	210	("20020072816" | "20050131558" | "20080144861" | "7742832" | "8234395" | "20130293345" | "20040117044" | "20050144284" | "20070288610" | "20080045140" | "20080066094" | "20080077261" | "6778869" | "7130608" |	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/24 15:48

		"8700730" | "6522886" | "6611537" | "7143939" | "20020002039" | "20030167335" | "20060149402" | "7558224" | "7571014" | "7626952" | "8483853" | "7130616" | "20030177889" | "20080025535" | "6631410" | "7187947" | "7761176" | "20090097672" | "5923902" | "7853341" | "8103009" | "20030020763" | "20040223622" | "20050289224" | "20050289244" | "20060041616" | "20070142022" | "20080152165" | "5946343" | "7668990" | "8788080" | "20020022453" | "20030157951" | "20040024478" | "6256554" | "7236773" | "20020003548" | "20040010727" | "20040225389" | "20050021470" | "20050254505" | "20090228919" | "5182552" | "7218708" | "7805210" | "7849181" | "7962482" | "8045952" | "8189824" | "20080162668" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20070142944" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020124097" | "20030198257" | "20040015252" | "20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517").PN.	DERWENT			
S499	0	S498 and kreifeldt.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 15:52
S500	29	("20020098878" | "20050100174" | "20050177256" | "20060179160" | "20060205349" | "20060229752" | "20070223725" | "20080092204" | "20100010651" | "20100052843" | "5406634" | "5519641" | "6889207").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 16:04
S501	0	S498 and S500	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/24 16:04

S502	13	("20020098878" | "20050100174" | "20050177256" | "20060179160" | "20060205349" | "20060229752" | "20070223725" | "20080092204" | "20100010651" | "20100052843" | "5406634" | "5519641" | "6889207").PN.	US-PGPUB; USPAT	OR	ON	2015/02/24 16:04
S504	1	("20060149402" "20050177256").pn. and (filter$6 $5pass$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:10
S505	89	$5speaker near3 pairing	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:25
S506	61	$5speaker near3 pairing and $5pass$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:25
S507	16	$5speaker near3 pairing and (filter$6 frequency cross$3over) same $5pass$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:27
S508	13	"299847".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:27
S509	7	"299847".ap. and $5pass$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:27

S510	0	$5speaker near3 pairing and select$4 near6 (filter$6 frequency cross$3over) same $5pass$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/03/09 11:29
S562	6,683	h04r2227/$3.cpc. h04r2420/$4.cpc. h04s7/30.cpc. h04r2227/$3.cpc. h04r27/$3.cpc. h04r3/12.cpc.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/08 16:19
S571	187	log$3compand$6 (log logar$6) near2 compand$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/11 09:23
S572	314	yamaha.as. and (packet same network$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 09:07
S573	112	yamaha.as. and (packet same network$6) and @ad<="20040401"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 09:09
S574	1	"20020124097" and (packet same network$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 09:10
S575	4	"20050135643" "20100057472"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 10:31

S576	4	"20050135643" "20100057472" and (stag$4 $5pass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 10:31
S577	3	("20050135643" "20100057472") and (stag$4 $5pass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 10:32
S578	3	("20050135643" "20100057472") and (stag$4 $5pass) and (high low hi$5 lo$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 10:33
S579	3	("20050135643" "20100057472") and (high low hi$5 lo$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 10:33
S580	111	"7483958" "20100228740"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 12:12
S581	4	("7483958" "20100228740").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 12:12
S582	8	("20070048713" "20120030366" "20060143236" "20080091771").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 12:14

S583	19	("20020080783" | "20020114354" | "20030018797" | "20030067437" | "20040208158" | "20040213230" | "20040228367" | "20130018960" | "6816818").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/05/12 12:24
S631	1	"921550".ap. and 5d	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/10/15 11:15
S632	79	sonos.as. and select$6.clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/11 14:28
S633	14	sonos.as. and select$6.clm. same display$6 same (zone scene)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/11 14:28
S659	11	"465457".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:53
S660	2	"20140361867"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:53
S661	11,175	((340/4.41 OR 381/107 OR 381/120 OR 381/80 OR 700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:57

S662	1	S659 AND ((G06F3/165 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F17/30026 OR G05B15/02 OR H03G1/02 OR H03G7/00 OR H03G3/20 OR H04H60/80 OR H04N21/43615 OR H04N21/4307 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12 OR H04R2420/01 OR H04R2420/07 OR H04R5/04 OR G11B19/02 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/30).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:57
S663	2,582	S661 AND ((G06F3/165 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F17/30026 OR G05B15/02 OR H03G1/02 OR H03G7/00 OR H03G3/20 OR H04H60/80 OR H04N21/43615 OR H04N21/4307 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12 OR H04R2420/01 OR H04R2420/07 OR H04R5/04 OR G11B19/02 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/30).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:57
S664	212	S663 and $6speaker with network$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:58
S665	331	S663 and $6speaker same network$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:58
S666	315	S663 and $6speaker same network$6 and (zone scene config$9 group$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 11:58
S667	166	S663 and $6speaker same network$6 and (zone scene config$9 group$5) same display$6	US-PGPUB; USPAT; EPO;	OR	ON	2016/01/13 11:58

			JPO; DERWENT			
S668	69	S663 and $6speaker same network$6 and (zone scene config$9 group$5) same display$6 same $5speak$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 12:23
S669	18	max with gordon with ramsay.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 12:32
S670	14	sonos and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 12:43
S671	12	sonos.as. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 12:43
S672	2	S670 not S671	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/01/13 12:43
S706	14	sonos and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:18
S707	12	sonos.as. and mccord	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/02/04 13:18

			DERWENT			
S708	2	S706 not S707	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:18
S709	211	("20020002039" | "20020072816" | "20020124097" | "20040117044" | "20050131558" | "20050254505" | "20070288610" | "20080066094" | "20080077261" | "20080144861" | "6587127" | "6604023" | "7742832" | "8234395" | "20020026442" | "6757517" | "7130616" | "8103009" | "20050021470" | "20060041616" | "20080025535" | "20080045140" | "6778869" | "7130608" | "7626952" | "8189824" | "6404811" | "20130103873" | "7558224" | "7761176" | "7962482" | "8700730" | "20030157951" | "7657910" | "20030167335" | "20060149402" | "20080066120" | "20090228919" | "6631410" | "7187947" | "7817960" | "5923902" | "7483538" | "8423893" | "20030020763" | "20030177889" | "20040223622" | "20050002535" | "20050289224" | "20070142022" | "5946343" | "7668990" | "20040024478" | "6256554" | "7143939" | "7236773" | "20020003548" | "20030198257" | "20040010727" | "20050289244" | "5182552" | "7218708" | "7805210" | "7849181" | "8045952" | "6522886" | "8014423" | "20140093085" | "20040225389" | "20070142944" | "20080152165" | "20080162668" | "20010042107" | "7853341" | "8762565" | "8965544" | "20040015252" | "20040131192" | "20050144284" | "20070189544" | "20090097672" | "7302468" | "7539551" | "7571014" | "7643894" | "8239559" | "8290603" | "8788080" | "20020022453" | "6611537").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:19
S710	3	"2014074089"	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/02/04 13:26

			DERWENT			
S711	1	"20160026428"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:26
S712	0	schdema.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:51
S713	6	shdema.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:52
S714	1	"20160026428" and during	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 14:13
S715	0	"20160026428" and while	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 14:14
S716	1	"20150286360" and (whil$4 during)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 14:14
S721	1	"20150286360" and (stereo left right surround)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/02/05 11:08

			DERWENT			
S722	2	"20140093085"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:21
S723	30	sonos.as. and stereo.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:21
S724	3	sonos.as. and stereo.ab. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:21
S725	1	"083499".ap. and stereo and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:22
S726	10	"8788080"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:23
S727	0	"013740" and paior$4.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:23
S728	2	"013740".ap. and pair$4.ab.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/02/05 11:23

			DERWENT			
S729	0	"853790".ap. and pair$4.ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:24
S730	4	"853790".ap. and pair$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:24
S731	13	"8483853" and pair$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 11:24
S732	2	"20130103873" and (pair$4 stereo surround)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 12:08
S733	7	"453343".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 14:03
S734	13	"494220".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/05 14:12
S735	764	("1559320" | "2180522" | "3710321" | "4013085" | "4081631" | "4090216" | "4107784" | "4108211" | "4159536" | "4181821" | "4204089" | "4241286" | "4253477" | "4332464" | "4384169" | "4386345" | "4433377" | "4451849" |	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/02/07 13:53

		"4485439" | "4495644" | "4513379" | "4513435" | "4555775" | "4577343" | "4586158" | "4587670" | "4589022" | "4611346" | "4615081" | "4618984" | "4642790" | "4654875" | "4655233" | "4658425" | "4670848" | "4677570" | "4680429" | "4680805" | "4686522" | "4698625" | "4709390" | "4713775" | "4736296" | "4750122" | "4754489" | "4755811" | "4783804" | "4785413" | "4790028" | "4797930" | "4802223" | "4803729" | "4807752" | "4813074" | "4827518" | "4829583" | "4831551" | "4833718" | "4837798" | "4837831" | "4875187" | "4887212" | "4896359" | "4908867" | "4918723" | "4926491" | "4928307" | "4931783" | "4935954" | "4939639" | "4941488" | "4945504" | "4953106" | "4972462" | "4975975" | "4980916" | "4985924" | "4994966" | "4994983" | "5001774" | "5003577" | "5007095" | "5007098" | "5016002" | "5027110" | "5027408" | "5029211" | "5033087" | "5046099" | "5047614" | "5047617" | "5050215" | "5053758" | "5054084" | "5067158" | "5067503" | "5075896" | "5079723" | "5083119" | "5083268" | "5086792" | "5090012" | "5091790" | "5103498" | "5109509" | "5111423" | "5119079" | "5122951" | "5123103" | "5125022" | "5125030" | "5127043" | "5133023" | "5144875" | "5148541" | "5153913" | "5157610" | "5157779" | "5161102" | "5164982" | "5167004" | "5175536" | "5175803" | "5175814" | "5179627" | "5195034" | "5195167" | "5201034" | "5210689" | "5212638" | "5212821" | "5218700" | "5220629" | "5231670" | "5237502" | "5241619" | "5252951" | "5253325" | "5257387" | "5260697" | "5266931" | "5266949" | "5274771" | "5274818" | "5276616" | "5276794" | "5278980" | "5283818" | "5287448" | "5289562" | "5293254" | "5296642" | "5297194" | "5299125" | "5299284" | "5305205" | "5305768" | "5315689" | "5325462" | "5326270" | "5327342" | "5329608" | "5333266" | "5335011" | "5335276" | "5341293" | "5341466" | "5353374" | "5353376" | "5353408" | "5353432" | "5357431" | "5367640" | "5369575" | "5369577" | "5371901" | "5373566" |	DERWENT			

		"5377103" | "5377303" | "5381853" | "5384671" | "5390236" | "5390281" | "5392419" | "5406305" | "5408060" | "5422656" | "5425108" | "5428731" | "5440615" | "5442598" | "5442780" | "5449368" | "5450523" | "5457768" | "5459488" | "5463696" | "5463725" | "5465401" | "5473728" | "5475798" | "5477447" | "5477448" | "5477451" | "5481739" | "5483261" | "5485372" | "5485543" | "5488204" | "5488727" | "5490234" | "5491758" | "5497319" | "5500903" | "5500905" | "5500937" | "5502774" | "5521816" | "5524140" | "5533182" | "5548507" | "5555343" | "5555344" | "5559301" | "5559945" | "5564446" | "5565888" | "5568540" | "5570324" | "5572576" | "5574824" | "5577135" | "5577164" | "5579037" | "5581484" | "5581652" | "5583993" | "5594641" | "5596260" | "5608698" | "5608841" | "5610812" | "5613122" | "5615378" | "5615384" | "5616876" | "5617386" | "5617539" | "5619583" | "5627939").PN.				
S736	2	"20110283190"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/08 13:55
S737	13	("272208" "771010").clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 13:56
S738	21	("272208" "771010").ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 13:56
S739	1	("272208" "771010").ap. and mccord	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/03/07 13:56

			DERWENT			
S740	16	("20020133249" | "20030021429" | "20030225468" | "20050144215" | "20050190933" | "20060095620" | "20070043804" | "20120033833" | "5744741" | "5842014" | "6351475" | "7058189" | "7653448" | "8396578" | "8452434" | "8467889").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/07 13:57
S741	7	S740 and memory.ab.	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/07 13:57
S742	0	S740 and cadenc$4	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/07 14:00
S743	21	("272208" "771010").ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:05
S744	9	("272833").ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:46
S745	1	("272833").ap. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:46
S746	3	("272833").ap. and (local$6 lan) same network	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:47
S747	3	"20120096125"	US-PGPUB; USPAT; EPO;	OR	ON	2016/03/07 14:49

			JPO; DERWENT			
S748	218	sonos.as. and (local$6 lan) same network	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:50
S749	4	sonos.as. and (local$6 lan) same network and @pd<="20091013"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 14:51
S750	223	("5668884" | "6611537" | "7571014" | "7657910" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8831761" | "8977974" | "6522886" | "7792311" | "8843224" | "20140016786" | "20140226823" | "20140294200" | "7519188" | "8331585" | "8879761" | "8914559" | "5923902" | "6404811" | "6778869" | "7643894" | "8234395" | "7689305" | "20130259254" | "7251533" | "7383036" | "7607091" | "5218710" | "7483538" | "20110170710" | "20130010970" | "20140219456" | "7072477" | "8175292" | "8243961" | "8984442" | "5553147" | "6704421" | "6757517" | "8014423" | "20140355768" | "5910991" | "7630500" | "5673323" | "7171010" | "8045952" | "8103009" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "7394480" | "8229125" | "8452020" | "8620006" | "8934655" | "6256554" | "6631410" | "6916980" | "7130608" | "7130616" | "20070142944" | "7853341" | "20120263325" | "20130028443" | "20140233755" | "8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "5946343" | "6931134" | "7143939" | "7236773" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 15:11

		"8855319" | "8934647" | "8965546" | "9020153").PN.				
S751	14	S750 and (local$6 lan) same network and @pd<="20091013"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 15:11
S752	14	S750 and (local$6 lan) same $5network$5 and @pd<="20091013"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 15:11
S753	9	S750 and (local$6 lan) same $5network$5 and @pd<="20091013" and (frequency pitch volume gain loudness sampling adj rate bit$3depth)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 15:23
S754	223	("5668884" | "6611537" | "7571014" | "7657910" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8831761" | "8977974" | "6522886" | "7792311" | "8843224" | "20140016786" | "20140226823" | "20140294200" | "7519188" | "8331585" | "8879761" | "8914559" | "5923902" | "6404811" | "6778869" | "7643894" | "8234395" | "7689305" | "20130259254" | "7251533" | "7383036" | "7607091" | "5218710" | "7483538" | "20110170710" | "20130010970" | "20140219456" | "7072477" | "8175292" | "8243961" | "8984442" | "5553147" | "6704421" | "6757517" | "8014423" | "20140355768" | "5910991" | "7630500" | "5673323" | "7171010" | "8045952" | "8103009" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "7394480" | "8229125" | "8452020" | "8620006" | "8934655" | "6256554" | "6631410" | "6916980" | "7130608" | "7130616" | "20070142944" | "7853341" | "20120263325" | "20130028443" | "20140233755" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 08:56

		"8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "5946343" | "6931134" | "7143939" | "7236773" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" | "8855319" | "8934647" | "8965546" | "9020153").PN.				
S755	9	S754 and (local$6 lan) same $5network$5 and @pd<="20091013" and (frequency pitch volume gain loudness sampling adj rate bit$3depth)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 08:56
S756	12	"552049".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:19
S757	2	"20150081072"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:26
S758	640	((G06F17/3074).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:28
S759	3,536	((G06F17/30769 G06F17/30772 G06F17/30778 G06F17/30749 G06F17/30752 G06F17/ G06F17/3074).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:29
S760	1,057	((H03G5/005 OR H03G5/025 OR H03G5/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:32

S761	1,057	((H03G5/005 OR H03G5/025 OR H03G5/165 H03G09/005 H03G09/02 H03G09/12 H03G09/14 H03G09/18 H03G09/00).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:34
S762	9	S759 and S761	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:34
S763	18	(US-20070223725-$ or US-20100052843-$ or US-20100010651-$ or US-20080092204-$ or US-20060229752-$ or US-20060205349-$ or US-20060179160-$ or US-20050100174-$ or US-20020098878-$ or US-20130103873-$ or US-20120096125-$ or US-20070214229-$).did. or (US-8423893-$ or US-6889207-$ or US-5519641-$ or US-5406634-$ or US-9094706-$).did. or (WO-2014074089-$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2016/03/08 12:35
S764	0	kreifeldt.in. and shdema.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:35
S765	0	(kreifeldt.in. shdema.in.) and S763	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:36
S766	0	("2015/0081072").URPN.	USPAT	OR	ON	2016/03/08 12:36
S767	5	"272833".ap.	USPAT	OR	ON	2016/03/08 12:36
S768	9	"272833".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:36

S769	12	sonos.as. and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:38
S770	122	("20010042107" | "20020002039" | "20020003548" | "20020022453" | "20020026442" | "20020072816" | "20020098878" | "20020124097" | "20020143547" | "20030020763" | "20030157951" | "20030167335" | "20030177889" | "20030198257" | "20040010727" | "20040015252" | "20040024478" | "20040117044" | "20040131192" | "20040147224" | "20040220687" | "20040223622" | "20040225389" | "20050002535" | "20050021470" | "20050100174" | "20050131558" | "20050144284" | "20050177256" | "20050254505" | "20050289224" | "20050289244" | "20060041616" | "20060149402" | "20060179160" | "20060205349" | "20060229752" | "20070142022" | "20070142944" | "20070189544" | "20070223725" | "20070288610" | "20080025535" | "20080045140" | "20080066094" | "20080066120" | "20080077261" | "20080092204" | "20080144861" | "20080152165" | "20080159545" | "20080162668" | "20090097672" | "20090228919" | "20090232326" | "20100010651" | "20100052843" | "20100153097" | "20100284389" | "20100299639" | "20120047435" | "20130253679" | "20130293345" | "5182552" | "5406634" | "5519641" | "5923902" | "5946343" | "6256554" | "6404811" | "6487296" | "6522886" | "6587127" | "6604023" | "6611537" | "6631410" | "6757517" | "6778869" | "6889207" | "7130608" | "7130616" | "7143939" | "7187947" | "7218708" | "7236773" | "7302468" | "7346332" | "7483538" | "7539551" | "7558224" | "7561932" | "7571014" | "7626952" | "7643894" | "7657910" | "7668990" | "7689305" | "7742832" | "7761176" | "7804972" | "7805210" | "7817960" | "7849181" | "7853341").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/08 12:38

		OR ("7962482" | "8014423" | "8045952" | "8054987" | "8086287" | "8103009" | "8135141" | "8189824" | "8233635" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8498726" | "8588432" | "8700730" | "8788080").PN. OR ("9219959").URPN.				
S771	3,536	((G06F17/30769 G06F17/30772 G06F17/30778 G06F17/30749 G06F17/30752 G06F17/ G06F17/3074).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:40
S772	1,057	((H03G5/005 OR H03G5/025 OR H03G5/165 H03G09/005 H03G09/02 H03G09/12 H03G09/14 H03G09/18 H03G09/00).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:40
S773	4,584	S771 S772	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:40
S774	4	mccord.xp. and apple.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 12:42
S775	2	"20060173972"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 13:07
S777	16	paige near2 smith	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:28

S778	0	paige near2 smith and mccord	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:28
S779	3	paige near2 smith and (eq equali$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:28
S780	2	"20020072816" and stream with digital	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:38
S781	0	"20020072816" and stream with digital same (disc)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:39
S782	1	"20020072816" and stream with digital same (cd)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 15:39
S783	223	("5668884" | "6611537" | "7571014" | "7657910" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8831761" | "8977974" | "6522886" | "7792311" | "8843224" | "20140016786" | "20140226823" | "20140294200" | "7519188" | "8331585" | "8879761" | "8914559" | "5923902" | "6404811" | "6778869" | "7643894" | "8234395" | "7689305" | "20130259254" | "7251533" | "7383036" | "7607091" | "5218710" | "7483538" | "20110170710" | "20130010970" | "20140219456" | "7072477" | "8175292" | "8243961" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/10 10:40

		"8984442" | "5553147" | "6704421" | "6757517" | "8014423" | "20140355768" | "5910991" | "7630500" | "5673323" | "7171010" | "8045952" | "8103009" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "7394480" | "8229125" | "8452020" | "8620006" | "8934655" | "6256554" | "6631410" | "6916980" | "7130608" | "7130616" | "20070142944" | "7853341" | "20120263325" | "20130028443" | "20140233755" | "8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "5946343" | "6931134" | "7143939" | "7236773" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" | "8855319" | "8934647" | "8965546" | "9020153").PN.				
S784	42	(US-20080159545-$ or US-20050177256-$ or US-20100153097-$ or US-20090232326-$ or US-20070223725-$ or US-20100052843-$ or US-20100010651-$ or US-20080092204-$ or US-20060229752-$ or US-20060205349-$ or US-20060179160-$ or US-20050100174-$ or US-20020098878-$ or US-20020022453-$ or US-20010042107-$ or US-20130103873-$ or US-20120096125-$ or US-20070214229-$ or US-20080162668-$ or US-20080152165-$ or US-20080077261-$ or US-20080045140-$ or US-20060173972-$ or US-20040015252-$ or US-20020072816-$ or US-20040237750-$).did. or (US-7689305-$ or US-8423893-$ or US-8233635-$ or US-8054987-$ or US-7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$ or US-6889207-$ or US-5519641-$ or US-5406634-$ or US-9094706-$ or US-8521316-$ or US-7962482-$ or US-7539551-$).did. or (WO-2014074089-$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2016/03/10 10:41
S785	1	S783 and S784	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/10 10:41

S786	41	(US-20080159545-$ or US-20050177256-$ or US-20100153097-$ or US-20090232326-$ or US-20070223725-$ or US-20100052843-$ or US-20100010651-$ or US-20080092204-$ or US-20060229752-$ or US-20060205349-$ or US-20060179160-$ or US-20050100174-$ or US-20020098878-$ or US-20020022453-$ or US-20010042107-$ or US-20130103873-$ or US-20120096125-$ or US-20070214229-$ or US-20080162668-$ or US-20080152165-$ or US-20080077261-$ or US-20080045140-$ or US-20060173972-$ or US-20040015252-$ or US-20020072816-$ or US-20040237750-$).did. or (US-8423893-$ or US-8233635-$ or US-8054987-$ or US-7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$ or US-6889207-$ or US-5519641-$ or US-5406634-$ or US-9094706-$ or US-8521316-$ or US-7962482-$ or US-7539551-$).did. or (WO-2014074089-$).did.	US-PGPUB; USPAT; DERWENT	OR	ON	2016/03/10 10:41
S787	86	("20030002689" | "20080144864" | "20110299696" | "5218710" | "6704421" | "8103009" | "8234395" | "20080025535" | "20100052843" | "20100284389" | "20020078161" | "20090024662" | "20130022221" | "5668884" | "5673323" | "6778869" | "6931134" | "20080002839" | "6916980" | "7171010" | "20070003067" | "20030210796" | "5946343" | "20060229752" | "20080162668" | "5553147" | "8045952" | "20080077261" | "20070142944" | "20080175411" | "20110044476" | "7792311" | "20030161479" | "20050147261" | "7571014" | "7643894" | "20100299639").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/10 10:42
S792	41	(US-20070047481-$ or US-20050254505-$ or US-20080077261-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020002039-$ or US-20050100174-$ or US-20060229752-$ or US-20030210796-$ or US-20100284389-$ or US-20080162668-$ or US-20060029005-$ or US-20080045140-$ or US-20040223622-$ or US-20050239397-$ or US-20020072816-$ or US-20070223725-$ or US-20120047435-$	US-PGPUB; USPAT; EPO	OR	ON	2016/03/10 13:49

		or US-20060205349-$).did. or (US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-6889207-$ or US-7302468-$ or US-8086287-$ or US-6678014-$ or US-7539551-$ or US-8423893-$ or US-7987294-$ or US-5519641-$ or US-5406634-$ or US-8189824-$).did. or (EP-1098476-$).did.				
S794	1,112	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:38
S795	10	"619813".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:38
S796	2	"20150181336"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:40
S797	85,654	((G06F3/165 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR H03G3/20 OR H03G1/02 OR H03G7/00 OR H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04R2420/01 OR H04R2430/01 OR H04S7/30 OR H04H60/80 OR H04N21/43615).CPC. OR (381/17 OR 709/221 OR 709/230 OR 709/231 OR 715/716 OR 715/727 OR 715/734 OR 715/735).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:40
S798	292	S794 and S797	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:40

S799	290	S798 and (stereo mono monaural left right)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:40
S800	4,370	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 12:48
S801	617	S797 and S800	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:02
S802	6,192	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:16
S803	1,249	S797 and S802	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:16
S804	232	S801 and S803	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:16
S805	28	S799 and S804	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:16

S806	173	S794 and S802	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:17
S807	105	S794 and S802 and S797	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:17
S808	29	S804 and S807	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:17
S809	28	S805 and S808	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:17
S810	104	S799 and S802	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:18
S811	104	S799 and S802 and S797	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:18
S812	28	S799 and S802 and S800	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:19

S813	28	S799 and S802 and S800 AND (LEFT RIGHT)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:19
S814	24	S799 and S802 and S800 AND (LEFT SAME RIGHT)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:19
S815	37,729	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26
S816	1,152	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26
S817	155,343	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S818	777	S816 and S817	US-PGPUB;	OR	ON	2016/05/27 13:26

			USPAT; EPO; JPO; DERWENT			
S819	1	S815 and S818	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26
S845	3	"20110137437"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/22 12:16
S846	4	"410690".ap. and obtain$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/22 12:19
S847	3	"20040237750"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/22 13:35
S848	5	"20080045140"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/22 13:43
S849	12	"552049".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 07:49
S850	5	"552049".ap. and medium	US-PGPUB; USPAT;	OR	ON	2016/06/23 07:49

			EPO; JPO; DERWENT			
S851	374	automat$6 with (stereo "5.1" sub$3woof$4) with (config$6 set$4up align$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:14
S852	44	automat$6 with (stereo "5.1" sub$3woof$4) with (config$6 set$4up align$5) and $5woof$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:16
S853	61	automat$6 with (stereo "5.1" sub$3woof$4) with (config$6 set$4up align$5) and (amplif$9 and attenua$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:20
S854	19	S852 and S853	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:21
S855	61	automat$6 with (stereo "5.1" sub$3woof$4) with (config$6 set$4up align$5) and (amplif$9 attenua$6) and S853	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:21
S856	61	S853 and S855	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:22
S857	38	automat$6 with (stereo "5.1" sub$3woof$4) with (config$6 set$4up align$5) and (amplif$9 attenua$6) and S852	US-PGPUB; USPAT; EPO;	OR	ON	2016/06/23 11:22

			JPO; DERWENT			
S858	1	automat$6 with (stereo "5.1" sub$3woof$4) with (acoustic$6 room) near4 (config$6 set$4up align$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:24
S859	77	$5speaker and (stereo "5.1" sub$3woof$4) with (acoustic$6 room) near4 (config$6 set$4up align$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:25
S860	649	(stereo "5.1" sub$3woof$4) with (acoustic$6 room $6speaker) near4 (config$6 set$4up align$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:25
S861	77	S859 and S860	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:25
S862	2	isley.in. and room and $6speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:29
S863	12	"384264".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:37
S864	9	("20080247554" | "6487296" | "6608907" | "8126182").PN.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/06/23 11:38

			DERWENT			
S865	3	"20050031135"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 11:42
S866	21	("20020196951" | "20030026438" | "20030031333" | "20030058786" | "20030179891" | "20060153403" | "4638505" | "4888809" | "5384855" | "5581626" | "5617480" | "5638343" | "5717465" | "5745586" | "5870484" | "6031920" | "6061648" | "6195435" | "6611603" | "7184556" | "7266207").PN. OR ("8705755").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/06/23 11:44
S867	8	("20120128166" | "7912225" | "20110164188" | "20110221656" | "20120093320" | "20120093320" | "20110157327" | "20070116306" | "20110157327" | "20120093320" | "6243476").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/06/23 11:49
S868	194	("20020026442" | "20030020763" | "6611537" | "7571014" | "7657910" | "7761176" | "7817960" | "7853341" | "8135141" | "8233635" | "8239559" | "000None" | "5406634" | "6522886" | "7483538" | "7539551" | "20080066094" | "5923902" | "6404811" | "6778869" | "7558224" | "7643894" | "7689305" | "8234395" | "20080242222" | "20020124097" | "5519641" | "6604023" | "7218708" | "7561932" | "8054987" | "8423893" | "8588432" | "20100299639" | "20020002039" | "20020022453" | "20100042107" | "6757517" | "6889207" | "8014423" | "8700730" | "8886347" | "20130253679" | "6587127" | "7187947" | "7626952" | "7668990" | "7742832" | "7804972" | "7805210" | "7849181" | "8045952" | "8103009" | "8290603" | "8483853" | "7346332" | "8843228" | "20020098878" | "20020143547" | "5182552" | "6256554" | "6631410" | "7130608" | "7130616" | "7302468" | "7962482" | "8086287" | "8762565" | "8965544" | "9245514" | "20020003548" | "20020072816" | "5946343" | "6487296" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:04

		"7143939" | "7236773" | "8189824" | "8498726" | "8788080").PN.				
S869	0	("20020026442" | "20030020763" | "6611537" | "7571014" | "7657910" | "7761176" | "7817960" | "7853341" | "8135141" | "8233635" | "8239559" | "000None" | "5406634" | "6522886" | "7483538" | "7539551" | "20080066094" | "5923902" | "6404811" | "6778869" | "7558224" | "7643894" | "7689305" | "8234395" | "20080242222" | "20020124097" | "5519641" | "6604023" | "7218708" | "7561932" | "8054987" | "8423893" | "8588432" | "20100299639" | "20020002039" | "20020022453" | "20100042107" | "6757517" | "6889207" | "8014423" | "8700730" | "8886347" | "20130253679" | "6587127" | "7187947" | "7626952" | "7668990" | "7742832" | "7804972" | "7805210" | "7849181" | "8045952" | "8103009" | "8290603" | "8483853" | "7346332" | "8843228" | "20020098878" | "20020143547" | "5182552" | "6256554" | "6631410" | "7130608" | "7130616" | "7302468" | "7962482" | "8086287" | "8762565" | "8965544" | "9245514" | "20020003548" | "20020072816" | "5946343" | "6487296" | "7143939" | "7236773" | "8189824" | "8498726" | "8788080").PN. and (zacchi korhonen baudino).in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:04
S870	2	("20020026442" | "20030020763" | "6611537" | "7571014" | "7657910" | "7761176" | "7817960" | "7853341" | "8135141" | "8233635" | "8239559" | "000None" | "5406634" | "6522886" | "7483538" | "7539551" | "20080066094" | "5923902" | "6404811" | "6778869" | "7558224" | "7643894" | "7689305" | "8234395" | "20080242222" | "20020124097" | "5519641" | "6604023" | "7218708" | "7561932" | "8054987" | "8423893" | "8588432" | "20100299639" | "20020002039" | "20020022453" | "20100042107" | "6757517" | "6889207" | "8014423" | "8700730" | "8886347" | "20130253679" | "6587127" | "7187947" | "7626952" | "7668990" | "7742832" | "7804972" | "7805210" | "7849181" | "8045952" | "8103009" | "8290603" | "8483853" | "7346332" | "8843228" | "20020098878" | "20020143547" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:04

		"5182552" | "6256554" | "6631410" | "7130608" | "7130616" | "7302468" | "7962482" | "8086287" | "8762565" | "8965544" | "9245514" | "20020003548" | "20020072816" | "5946343" | "6487296" | "7143939" | "7236773" | "8189824" | "8498726" | "8788080").PN. and (zacchi korhonen baudino wijeratne).in.				
S871	281	("20020072816" | "20050131558" | "20080144861" | "7742832" | "8234395" | "20130293345" | "20020098878" | "20100052843" | "8498726" | "20050177256" | "20070223725" | "20040117044" | "20050144284" | "20070288610" | "20080045140" | "20080066094" | "20080077261" | "6778869" | "7130608" | "8700730" | "6522886" | "6611537" | "7143939" | "7689305" | "8233635" | "8423893" | "8588432" | "8135141" | "20020002039" | "20030167335" | "20060149402" | "7558224" | "7571014" | "7626952" | "8483853" | "7130616" | "20070223725" | "8054987" | "20040220687" | "20050100174" | "5519641" | "20030177889" | "20080025535" | "6631410" | "7187947" | "7761176" | "20090097672" | "5923902" | "7853341" | "8103009" | "20100010651" | "20100153097" | "5519641" | "6889207" | "7804972" | "20040147224" | "20060205349" | "20100299639" | "6889207" | "7561932" | "20030020763" | "20040223622" | "20050289224" | "20050289244" | "20060041616" | "20070142022" | "20080152165" | "5946343" | "7668990" | "8788080" | "20020022453" | "20030157951" | "20040024478" | "6256554" | "7236773" | "5406634" | "20100052843" | "20120047435" | "20020003548" | "20040010727" | "20040225389" | "20050021470" | "20050254505" | "20090228919" | "5182552" | "7218708" | "7805210" | "7849181" | "7962482" | "8045952" | "8189824" | "20080162668" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20050177256" | "6487296" | "7346332" | "8423893" | "20070142944" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020143547" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:06

		"20060179160" | "20060229752" | "20080092204" | "20100284389" | "20020124097" | "20030198257" | "20040015252" | "20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517" | "20050100174" | "20060179160" | "20060205349" | "20060229752" | "20080092204" | "20080159545" | "20090232326" | "20020098878" | "20100010651" | "5406634" | "8086287").PN.				
S872	8	S871 and (zacchi korhonen baudino wijeratne).in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:06
S873	42	wireless with network with magic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:06
S874	26	("2008/0077261").URPN.	USPAT	OR	ON	2016/06/23 12:10
S875	11	baudino.in. and motorola.as.	USPAT	OR	ON	2016/06/23 12:10
S876	100	baudino.in. and motorola.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:10
S877	110	("20140068434" | "8046797" | "20030023973" | "20040044525" | "20110137724" | "20130124596" | "20140172140" | "20070294622" | "20080144860" | "20060143647" | "8028314" | "8892426" | "5689641" | "8200962" | "20100094867" | "20050237377" | "8965544" | "8595624" | "8611559" | "6457010" | "8302127" | "8774955" | "20050248652" | "20070169165" | "20150207478" | "20050283797" | "20120291053" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 17:35

		"20140328500" | "20080243609" | "20100146085" | "20140189139" | "8655307" | "20110113337" | "20130345840" | "4306113" | "8429243" | "8533166" | "20060210097" | "20130238996" | "20140074621" | "20050043831" | "8146126" | "20070089127" | "20140371889" | "20060291666" | "8533166").PN.				
S878	6	("20140068434" | "8046797" | "20030023973" | "20040044525" | "20110137724" | "20130124596" | "20140172140" | "20070294622" | "20080144860" | "20060143647" | "8028314" | "8892426" | "5689641" | "8200962" | "20100094867" | "20050237377" | "8965544" | "8595624" | "8611559" | "6457010" | "8302127" | "8774955" | "20050248652" | "20070169165" | "20150207478" | "20050283797" | "20120291053" | "20140328500" | "20080243609" | "20100146085" | "20140189139" | "8655307" | "20110113337" | "20130345840" | "4306113" | "8429243" | "8533166" | "20060210097" | "20130238996" | "20140074621" | "20050043831" | "8146126" | "20070089127" | "20140371889" | "20060291666" | "8533166").PN. and (ball yerrace hii$9).in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 17:36
S879	45	"6122331"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 18:01
S880	0	mccord and "chung.in"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:44
S881	22	mccord and chung.in.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/06/24 14:44

			DERWENT			
S882	1	mccord.xp. and chung.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:44
S883	37	mondo.as. and chung.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:44
S884	0	mondo.as. and chung.in. and automatic$6 with (increas$5 amplif$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:44
S885	12	mondo.as. and chung.in. and automatic$6 same (increas$5 amplif$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:45
S886	0	mondo.as. and chung.in. and automatic$6 same (increas$5 amplif$9) same ($6woof$6 bass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:45
S887	12	mondo.as. and chung.in. and automatic$6 same (increas$5 amplif$9) and ($6woof$6 bass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:45
S888	10,807	mondo.as. and chung.in. and automatic$6 same (increas$5 amplif$9)(increas$5 amplif$9) same ($6woof$6 bass)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/06/24 14:46

			DERWENT			
S889	12	mondo.as. and chung.in. and automatic$6 same (increas$5 amplif$9) and(increas$5 amplif$9) same ($6woof$6 bass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:47
S890	45	automat$8 with (config$6 align$7 set$4) with $4woof$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:54
S891	21	automat$8 with (config$6 align$7 set$4) with $4woof$4 same (amp amplif$9 gain volume)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 14:57
S892	0	automat$8 with (increas$6) with $4woof$4 same (amp amplif$9 gain volume)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:01
S893	13	automat$8 with (increas$6) with (bass $4woof$4) same (amp amplif$9 gain volume)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:01
S894	3	("2013/0305152").URPN.	USPAT	OR	ON	2016/06/24 15:21
S895	65	("8234395" | "20040024478" | "20050069153" | "20140192986" | "8527876" | "20080144864" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8977974" | "6778869" | "20020022453" | "6522886" | "6611537" | "7143939" | "20070032895" | "6674864" | "20090011798" | "20130022221" | "20140016786" | "20140226823" |	USPAT	OR	ON	2016/06/24 15:22

		"20140294200" | "20150220302" | "4696037" | "7519188" | "8331585" | "8879761" | "8914559" | "7130608" | "7130616" | "20090180632" | "20130259254" | "6809635" | "20020026442" | "20030157951" | "5923902" | "20060050896" | "6771784" | "7853341" | "8103009" | "20050201549" | "20070003067" | "20110170710" | "20120051567" | "20130010970" | "20140219456" | "6882335" | "7072477" | "8175292" | "8243961" | "8984442" | "6256554" | "7236773" | "6681019" | "20140355768" | "5910991" | "7630500" | "8045952" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20120148075" | "20140219483" | "20110002487" | "20130129122" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "5553147" | "8229125" | "8452020" | "8620006" | "8934655" | "9042556" | "20070142944" | "4908868" | "20070265031" | "20120263325" | "20130028443" | "8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "7571014" | "7643894" | "20020124097" | "6631410" | "6757517" | "20130202131" | "8989406" | "20060050896" | "20040023697" | "20080146289" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" | "8855319" | "8934647" | "8965546" | "9020153").PN.				
S896	253	("8234395" | "20040024478" | "20050069153" | "20140192986" | "8527876" | "20080144864" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8977974" | "6778869" | "20020022453" | "6522886" | "6611537" | "7143939" | "20070032895" | "6674864" | "20090011798" | "20130022221" | "20140016786" | "20140226823" | "20140294200" | "20150220302" | "4696037" | "7519188" | "8331585" | "8879761" | "8914559" | "7130608" | "7130616" | "20090180632" | "20130259254" | "6809635" | "20020026442" | "20030157951" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:22

		"5923902" | "20060050896" | "6771784" | "7853341" | "8103009" | "20050201549" | "20070003067" | "20110170710" | "20120051567" | "20130010970" | "20140219456" | "6882335" | "7072477" | "8175292" | "8243961" | "8984442" | "6256554" | "7236773" | "6681019" | "20140355768" | "5910991" | "7630500" | "8045952" | "20010042107" | "6404811" | "7657910" | "8014423" | "7483538" | "20120148075" | "20140219483" | "20110002487" | "20130129122" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "5553147" | "8229125" | "8452020" | "8620006" | "8934655" | "9042556" | "20070142944" | "4908868" | "20070265031" | "20120263325" | "20130028443" | "8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "7571014" | "7643894" | "20020124097" | "6631410" | "6757517" | "20130202131" | "8989406" | "20060050896" | "20040023697" | "20080146289" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" | "8855319" | "8934647" | "8965546" | "9020153").PN.				
S897	68	genelec.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:24
S898	16	genelec.as. and settings	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:25
S899	7	genelec.as. and settings same measur$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:25

S900	10	"038495".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:26
S901	10	("20050175195" | "20070142942" | "20080318629" | "20090269036" | "20110002471" | "20110033056" | "20120201393" | "6859538" | "7099481" | "8189816").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/06/24 15:33
S902	2	"20060294569" and automatic$6 same (increas$5 amplif$9) and ($6woof$6 bass)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 16:26
S903	195	("20020026442" | "20030020763" | "6611537" | "7571014" | "7657910" | "7761176" | "7817960" | "7853341" | "8135141" | "8233635" | "8239559" | "000None" | "5406634" | "6522886" | "7483538" | "7539551" | "20080066094" | "5923902" | "6404811" | "6778869" | "7558224" | "7643894" | "7689305" | "8234395" | "20080242222" | "20020124097" | "5519641" | "6604023" | "7218708" | "7561932" | "8054987" | "8423893" | "8588432" | "20100299639" | "20020002039" | "20020022453" | "20100042107" | "6757517" | "6889207" | "8014423" | "8700730" | "8886347" | "20130253679" | "6587127" | "7187947" | "7626952" | "7668990" | "7742832" | "7804972" | "7805210" | "7849181" | "8045952" | "8103009" | "8290603" | "8483853" | "7346332" | "8843228" | "20020098878" | "20020143547" | "5182552" | "6256554" | "6631410" | "7130608" | "7130616" | "7302468" | "7962482" | "8086287" | "8762565" | "8965544" | "9245514" | "20020003548" | "20020072816" | "5946343" | "6487296" | "7143939" | "7236773" | "8189824" | "8498726" | "8788080").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/25 10:08
S952	12	"552049".ap.	US-PGPUB; USPAT; EPO;	OR	ON	2016/09/08 10:50

			JPO; DERWENT			
S953	1	"552049".ap. and playback adj device	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 10:50
S954	5	"20110016405" "20080216125"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:00
S955	5	S954 and (limit$6 max$4 min$4 optim$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:01
S956	6	"904678".ap. and (cover$5 thresh$6 distance)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:02
S957	0	"904678".ap. and (cover$5 same (less radio distance))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:08
S958	1	"904678".ap. and (cover$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:09
S959	7	"904678".ap. and (cover$5 less)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/09/08 13:10

			DERWENT			
S960	5	("4,254,303" "20060002572").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:25
S961	7	("158990").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:25
S962	2	"20150205577"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:26
S963	1	"20150205577" and (range same speech)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:31
S964	1	"20150205577" and (range same speech) and outside	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:31
S965	0	"20150205577" and (hz hertz khz)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:32
S966	1	"20150205577" and (frequency same speech) and outside	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/09/08 13:32

			DERWENT			
S967	5,135	speech near3 intelligib$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:42
S968	119	S967 and paus$6 with (present$6 media audio display video av multimedia $4media)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:43
S969	0	S967 and paus$6 with (present$6 media audio display video av multimedia $4media) and dialnorm	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:43
S970	108	S967 and paus$6 with (present$6 media audio display video av multimedia $4media) and frequency	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:46
S971	61	S967 and paus$6 with (present$6 media audio display video av multimedia $4media) and frequency with ($5width range)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:47
S972	0	skype and eljaiek	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:47
S973	0	("2014/0309991").URPN.	USPAT	OR	OFF	2016/09/08 13:50
S974	1	"8670986"	USPAT	OR	OFF	2016/09/08 13:50

S975	5	"803291".ap.	USPAT	OR	OFF	2016/09/08 13:50
S976	11	"803291".ap.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/08 13:51
S977	4	("2011/0112668").URPN.	USPAT	OR	OFF	2016/09/08 13:56
S978	0	("2011/0112668").URPN. and paus$6	USPAT	OR	OFF	2016/09/08 13:57
S979	11	"8977974"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:58
S980	10	"8977974" and paus$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:58
S981	2	"158990".ap. and interrupt$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 13:59
S982	3	"20110043617"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 14:04
S983	1	"552049".ap. and playback near3 device	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/09 13:05
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S997	13	S996 and (bryce zacchi baudino)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:36
S998	2	"20060253210"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:47
S999	1	"20060253210" and zero	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:49
S1000	0	"20060253210" and zero same cross$6	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/10/29 10:49

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S1002	1	("1705588" "2014109982") and zero and cross$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:50
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S1009	16	S1008 and shdema	US-PGPUB;	OR	ON	2017/01/03 10:19

			USPAT; EPO; JPO; DERWENT			
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S1159	2	"20160357503"	US-PGPUB; USPAT; EPO;	OR	ON	2017/03/18 14:55

			JPO; DERWENT			
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S1162	6	"2005004532"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:34
S1163	45	coherenc$6 near3 (vector matrix) with second	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:37
S1164	802,147	decompos$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:41
S1165	63,814	decompos$6 and surfac$4 near3 (group region timbral patch$4)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:42

S1166	945	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:42
S1167	548	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and position	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:43
S1168	569	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:43
S1169	115	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4) and mov$4 near3 averag$4	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:43
S1170	140	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4) and (mov$4 near3 averag$4 ppm vu)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:44
S1171	106	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4) and (mov$4 near3 averag$4 ppm vu) and delay$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:44
S1172	95	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4) and (mov$4 near3 averag$4 ppm vu) and delay$6 and (voxel$8 mesh$6)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:44
S1173	13	"754155".ap.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:47

S1174	2	"20150378019"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:47
S1175	45	decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4) and (intensity) and (spatial$6 position$4) and (mov$4 near3 averag$4 ppm vu) not S1172	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:48
S1176	7	surface adj patch$4 and scene adj decompos$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 17:43
S1177	10	scene near3 decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 17:43
S1178	41	(sound near2 ray sound$ray wave$ray wave near2 ray) and decompos$6 and surfac$4 near3 (group region timbral patch$4) and ((path patch ray) near2 trac$6 beam$form$4)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 17:45
S1234	9	"20110016405" "20080216125" "20120286927" "20080204410"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/20 14:16
S1235	271	("816217" "861653" "035112")"ap."	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/20 16:09
S1236	0	("816217" "861653" "035112").ap. and LAN and volume near2 control$4	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/03/20 16:09

			DERWENT			
S1239	1	"743896".ap. and hardware	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/20 16:13
S1240	8	("5198603" | "6032202" | "7945143" | "8483853" | "9507780" | "20030063528" | "20030123853" | "20060161742").PN.	US-PGPUB; USPAT	OR	ON	2017/03/21 11:19
S1241	4	("816217" "861653" "035112").ap. and network and volume near2 control$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:20
S1242	4	("816217" "861653" "035112").ap. and network$4 and volume near2 control$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:20
S1243	14	("5596696" | "6917592" | "7257398" | "7286652" | "7400644" | "7907819" | "20020131398" | "20030008616" | "20030172123" | "20040032421" | "20040044742" | "20050105052" | "20050159833" | "20050262217").PN.	US-PGPUB; USPAT	OR	ON	2017/03/21 11:22
S1244	2	shdema.in. and $5speaker	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:22
S1245	1	shdema.in. and $5speaker and volume	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:23
S1246	3	shdema.in. and volume same (user instruct$6 command$4)	US-PGPUB; USPAT;	OR	ON	2017/03/21 11:23

			EPO; JPO; DERWENT			
S1247	1	"5182552".pn. and volume same (user instruct$6 command$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:25
S1248	0	"5361381".ap. and volume same (user instruct$6 command$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:30
S1249	0	"5361381".ap. and volume	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:30
S1250	2	"5361381".pn. and volume	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:31
S1251	1	"5361381".pn. and volume with (user second)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:31
S1252	1	"5361381".pn. and volume with (user second left right)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/21 11:31
S1253	9	("7590249" | "7974422" | "8315396" | "8504376" | "8594319" | "8744067" | "20100322446" | "20110196685" | "20120177204").PN.	US-PGPUB; USPAT	OR	ON	2017/03/21 13:18

S1254	0	("7590249" | "7974422" | "8315396" | "8504376" | "8594319" | "8744067" | "20100322446" | "20110196685" | "20120177204").PN. and dme	US-PGPUB; USPAT	OR	ON	2017/03/21 13:19
S1255	0	("7590249" | "7974422" | "8315396" | "8504376" | "8594319" | "8744067" | "20100322446" | "20110196685" | "20120177204").PN. and height	US-PGPUB; USPAT	OR	ON	2017/03/21 13:19
S1256	16,075	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object)	US-PGPUB; USPAT	OR	ON	2017/03/21 13:19
S1257	20	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and saoc	US-PGPUB; USPAT	OR	ON	2017/03/21 13:20
S1258	0	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and saoc and dme	US-PGPUB; USPAT	OR	ON	2017/03/21 13:21
S1259	0	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and saoc and dialog same effect	US-PGPUB; USPAT	OR	ON	2017/03/21 13:21
S1260	64	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and dialog same effect	US-PGPUB; USPAT	OR	ON	2017/03/21 13:21
S1261	0	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and dialog same effect and dme	US-PGPUB; USPAT	OR	ON	2017/03/21 13:21
S1262	106	(surround "5.1" "7.1" lfe) and height near6 (channel parameter object) and dme	US-PGPUB; USPAT	OR	ON	2017/03/21 13:21
S1263	7	height near6 (channel parameter object) and dialog same effect and dme	US-PGPUB; USPAT	OR	ON	2017/03/21 13:22
S1264	8	"874095".ap.	US-PGPUB; USPAT	OR	ON	2017/03/21 13:22
S1279	12	"243355".ap.	US-PGPUB; USPAT	OR	ON	2017/03/21 17:50
S1280	1	"20040087686"	US-PGPUB; USPAT	OR	ON	2017/03/21 17:52
S1281	1	"20070087686"	US-PGPUB; USPAT	OR	ON	2017/03/21 17:53
S1282	10	("7627825" "6469633" "5761320" "6469633" "6826283" "5182552"	US-PGPUB; USPAT	OR	ON	2017/03/21 17:54

		"20020072816" "20030103088" "7987294" "7197148" "5282552" "6469633").pn.				
S1283	4	("7627825" "6469633" "5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7987294" "7197148" "5282552" "6469633").pn. and group$5 same (volume amplitude level gain)	US-PGPUB; USPAT	OR	ON	2017/03/21 17:54
S1284	6	("7627825" "6469633" "5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7987294" "7197148" "5282552" "6469633").pn. and (group$6)	US-PGPUB; USPAT	OR	ON	2017/03/21 17:57
S1285	2	("7627825" "6469633" "5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7987294" "7197148" "5282552" "6469633").pn. and (group$6) not S1283	US-PGPUB; USPAT	OR	ON	2017/03/21 17:57
S1286	1	"20020072816" and (lan local network$4)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:01
S1287	0	"20020072816" and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:02
S1288	1	"20020072816" and (time timing)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:02
S1289	1	"20020072816" and (interface gui ui)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:05
S1290	1	"20020072816" and (interface gui ui) same (volume parameters)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:05
S1291	1	"20020072816" and (interface gui ui) same (volume same parameters)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:07
S1292	0	"20020072816" and (interface gui ui) same (address$4 same parameters)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:08
S1293	1	"20020072816" and (address$4 same parameters)	US-PGPUB; USPAT	OR	ON	2017/03/21 18:08
S1294	1	"20020072816" and (address$4 same (volume information parameters))	US-PGPUB; USPAT	OR	ON	2017/03/21 18:09

S1295	1	"20020072816" and (stereo same (volume information parameters))	US-PGPUB; USPAT	OR	ON	2017/03/21 18:15
S1296	4,078	mpeg4 and pair$6	US-PGPUB; USPAT	OR	ON	2017/03/22 12:17
S1297	15,863	(mpeg adj "4" mpeg4) and pair$6	US-PGPUB; USPAT	OR	ON	2017/03/22 12:17
S1298	1	"20020072816" and (surround$4 "5.1" stereo)	US-PGPUB; USPAT	OR	ON	2017/03/22 12:18
S1299	0	"20020072816" and (sync synch synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/22 12:19
S1300	12	"339249".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/27 16:28
S1301	2	"20160026429"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/27 16:34
S1302	16,138	((G06F3/165 g06f3/162).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/27 16:36
S1303	1,129	((G06F3/165 g06f3/162).CPC. and (715/716 700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/27 16:36
S1343	0	"339249" and fig$6 with 6c	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/03/29 17:14

			DERWENT			
S1344	0	"339249".ap. and fig$6 with 6c	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/29 17:14
S1345	12	"339249".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/29 17:14
S1346	3	"20120078741"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/29 18:20
S1347	1	("20120078741" "20100329471").pn. and wind	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/30 10:37
S1348	2	"733218".ap. and (trigger$4 actuat$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/30 10:44
S1349	4	"248255".ap. and (trigger$4 actuat$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/30 13:03
S1350	4	"248255".ap. and (thresh$6 trigger$4 actuat$6)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/03/30 13:03

			DERWENT			
S1351	12	"248255".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/30 13:03
S1352	12	"338710".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/31 16:15
S1353	2	"20160026428"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/31 16:16
S1354	8	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:18
S1355	3	("7483538" | "7853341" | "8103009").PN.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:18
S1356	5	("8423893" | "8762565" | "8965544" | "20130103873" | "20140093085").PN.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:19
S1357	16	S1354 S1355 S1356	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/31 16:19
S1358	0	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and "not$"	US-PGPUB; USPAT	OR	ON	2017/03/31 16:19
S1359	0	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and "does"	US-PGPUB; USPAT	OR	ON	2017/03/31 16:20

S1360	0	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and "does$6"	US-PGPUB; USPAT	OR	ON	2017/03/31 16:20
S1361	1	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and does$6	US-PGPUB; USPAT	OR	ON	2017/03/31 16:20
S1362	0	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and undefiner	US-PGPUB; USPAT	OR	ON	2017/03/31 16:20
S1363	1	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and undefin$4	US-PGPUB; USPAT	OR	ON	2017/03/31 16:20
S1398	2	"20140093219"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/17 16:55
S1399	240	"7571014"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/17 16:59
S1400	2	"7571014".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/17 16:59
S1401	209	("20010009604" | "20010022823" | "20010032188" | "20020002039" | "20020002562" | "20020003548" | "20020034374" | "20020042844" | "20020049843" | "20020065926" | "20020072816" | "20020073228" | "20020090914" | "20020093478" | "20020109710" | "20020112244" | "20020116476" | "20020129156" | "20020143998" | "20020163361" | "20020165921" | "20020178191" | "20020188762" | "20030002609" | "20030020763" | "20030023741" |	US-PGPUB; USPAT	OR	ON	2017/04/17 17:21

		"20030035444" | "20030041173" | "20030041174" | "20030043924" | "20030066094" | "20030099212" | "20030099221" | "20030126211" | "20030195964" | "20030198257" | "20030210796" | "20030220973" | "20030231871" | "20030235304" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040015252" | "20040024925" | "20040025185" | "20040027166" | "20040032348" | "20040066736" | "20040075767" | "20040078383" | "20040078812" | "20040131192" | "20040170383" | "20040203378" | "20040215611" | "20040249965" | "20040249982" | "20040252400" | "20040261040" | "20050010691" | "20050013394" | "20050021590" | "20050047605" | "20050058149" | "20050081213" | "20050108320" | "20050114538" | "20050125357" | "20050166157" | "20050177643" | "20050181348" | "20050195205" | "20050201254" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20060095516" | "20060107237" | "20060119497" | "20060143236" | "20060168340" | "20060195462" | "20060195479" | "20060195480" | "20060253782" | "20060294074" | "20070033402" | "20070038999" | "20070043847" | "20070048713" | "20070054680" | "20070136778" | "20070142022" | "20070143493" | "20070169115" | "20070180137" | "20070214182" | "20070224937" | "20070271388" | "20070288470" | "20070299778" | "20080005690" | "20080016465" | "20080022320" | "20080059510" | "20080091771" | "20080109529" | "20080120429" | "20080144861" | "20080154959" | "20080194276" | "20080301280" | "20090031336" | "20090076881" | "20090150806" | "20090157905" | "20090179867" | "20090222115" | "20090228919" | "20090265426" | "20090313369" | "20100010648" | "20100036950" | "20100049835" | "20100054275" | "20100082731" | "20100094834" | "20100095332" | "20100131567" |			

		"20100284389" | "20100299391" | "20100299639" | "20100318917" | "20110004330" | "20110066943" | "20110087842" | "20110119706" | "20110154173" | "20110202430" | "20110202842" | "20110211534" | "20110264732" | "20120029671" | "20120030366" | "20120054278" | "20120060046" | "20120096526" | "20120117168" | "20120117185" | "20120117586" | "20120129446" | "20120151320" | "20120206623" | "20120210205" | "20120233067" | "20120233639" | "20120272156" | "20120284423" | "20120311635" | "20130007617" | "20130024880" | "20130031162" | "20130061296" | "20130070093" | "20130073584" | "20130080599" | "20130080955" | "20130129232" | "20130174204" | "20130246522" | "20130246916" | "20130254207" | "20130310316" | "20130346859" | "20140047074" | "4296278" | "4816989" | "5182552" | "5239458" | "5299266" | "5406634" | "5440644" | "5467342" | "5491839" | "5553222" | "5563946" | "5668884" | "5673323" | "5751819" | "5761320" | "5808662" | "5815689" | "5856827" | "5867691" | "5875354" | "5887143" | "5946343" | "5956088" | "6002862" | "6009457" | "6026150" | "6031818" | "6032202" | "6128318" | "6157957" | "6175872").PN.				
S1402	91	("6181316" | "6185737" | "6195436" | "6199169" | "6255961" | "6308207" | "6324586" | "6332147" | "6351821" | "6430353" | "6469633" | "6487296" | "6526325" | "6587127" | "6594691" | "6598172" | "6674803" | "6728531" | "6732155" | "6836788" | "6898642" | "6912610" | "6920373" | "6934766" | "7007106" | "7017118" | "7020048" | "7020791" | "7043651" | "7047308" | "7113833" | "7113999" | "7115017" | "7117451" | "7143141" | "7162315" | "7185090" | "7187947" | "7206367" | "7209795" | "7218708" | "7281034" | "7293060" | "7295548" | "7312785" | "7324857" | "7333519" | "7358960" | "7372846" | "7392102" | "7483958" | "7574274" | "7630501" | "7657644" |	US-PGPUB; USPAT	OR	ON	2017/04/17 17:21

		"7668990" | "7669219" | "7675943" | "7676142" | "7702279" | "7720096" | "7788138" | "7805682" | "7885622" | "7921369" | "7934239" | "7987294" | "7996566" | "8074253" | "8086752" | "8112032" | "8131390" | "8169938" | "8290603" | "8315555" | "8370678" | "8423659" | "8483853" | "8521316" | "8588949" | "8613385" | "8666826" | "8775546" | "8843500" | "8892648" | "9052810" | "9137564" | "9246866" | "9247363" | "9344292" | "9489383" | "9510055").PN.				
S1403	7	("2007/0033402").URPN.	USPAT	OR	ON	2017/04/17 17:28
S1404	19	social adj discovery	USPAT	OR	ON	2017/04/17 17:31
S1405	7	"495595".ap.	USPAT	OR	ON	2017/04/18 11:23
S1406	11	"495595".ap.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:23
S1407	2	"20160085499"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:23
S1408	68,186	((G05B15/02 OR G06F3/165 OR G06Q50/01 OR H04L65/403).CPC. OR (700/94 OR 709/204).CCLS.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:23
S1409	209	("20010009604" | "20010022823" | "20010032188" | "20020002039" | "20020002562" | "20020003548" | "20020034374" | "20020042844" | "20020049843" | "20020065926" | "20020072816" | "20020073228" | "20020090914" | "20020093478" | "20020109710" | "20020112244" | "20020116476" | "20020129156" | "20020143998" | "20020163361" | "20020165921" | "20020178191" | "20020188762" | "20030002609" | "20030020763" | "20030023741" |	US-PGPUB; USPAT	OR	ON	2017/04/18 11:24

		"20030035444" | "20030041173" | "20030041174" | "20030043924" | "20030066094" | "20030099212" | "20030099221" | "20030126211" | "20030195964" | "20030198257" | "20030210796" | "20030220973" | "20030231871" | "20030235304" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040015252" | "20040024925" | "20040025185" | "20040027166" | "20040032348" | "20040066736" | "20040075767" | "20040078383" | "20040078812" | "20040131192" | "20040170383" | "20040203378" | "20040215611" | "20040249965" | "20040249982" | "20040252400" | "20040261040" | "20050010691" | "20050013394" | "20050021590" | "20050047605" | "20050058149" | "20050081213" | "20050108320" | "20050114538" | "20050125357" | "20050166157" | "20050177643" | "20050181348" | "20050195205" | "20050201254" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20060095516" | "20060107237" | "20060119497" | "20060143236" | "20060168340" | "20060195462" | "20060195479" | "20060195480" | "20060253782" | "20060294074" | "20070033402" | "20070038999" | "20070043847" | "20070048713" | "20070054680" | "20070136778" | "20070142022" | "20070143493" | "20070169115" | "20070180137" | "20070214182" | "20070224937" | "20070271388" | "20070288470" | "20070299778" | "20080005690" | "20080016465" | "20080022320" | "20080059510" | "20080091771" | "20080109529" | "20080120429" | "20080144861" | "20080154959" | "20080194276" | "20080301280" | "20090031336" | "20090076881" | "20090150806" | "20090157905" | "20090179867" | "20090222115" | "20090228919" | "20090265426" | "20090313369" | "20100010648" | "20100036950" | "20100049835" | "20100054275" | "20100082731" | "20100094834" | "20100095332" | "20100131567" |			

		"20100284389" | "20100299391" | "20100299639" | "20100318917" | "20110004330" | "20110066943" | "20110087842" | "20110119706" | "20110154173" | "20110202430" | "20110202842" | "20110211534" | "20110264732" | "20120029671" | "20120030366" | "20120054278" | "20120060046" | "20120096526" | "20120117168" | "20120117185" | "20120117586" | "20120129446" | "20120151320" | "20120206623" | "20120210205" | "20120233067" | "20120233639" | "20120272156" | "20120284423" | "20120311635" | "20130007617" | "20130024880" | "20130031162" | "20130061296" | "20130070093" | "20130073584" | "20130080599" | "20130080955" | "20130129232" | "20130174204" | "20130246522" | "20130246916" | "20130254207" | "20130310316" | "20130346859" | "20140047074" | "4296278" | "4816989" | "5182552" | "5239458" | "5299266" | "5406634" | "5440644" | "5467342" | "5491839" | "5553222" | "5563946" | "5668884" | "5673323" | "5751819" | "5761320" | "5808662" | "5815689" | "5856827" | "5867691" | "5875354" | "5887143" | "5946343" | "5956088" | "6002862" | "6009457" | "6026150" | "6031818" | "6032202" | "6128318" | "6157957" | "6175872").PN.				
S1410	91	("6181316" | "6185737" | "6195436" | "6199169" | "6255961" | "6308207" | "6324586" | "6332147" | "6351821" | "6430353" | "6469633" | "6487296" | "6526325" | "6587127" | "6594691" | "6598172" | "6674803" | "6728531" | "6732155" | "6836788" | "6898642" | "6912610" | "6920373" | "6934766" | "7007106" | "7017118" | "7020048" | "7020791" | "7043651" | "7047308" | "7113833" | "7113999" | "7115017" | "7117451" | "7143141" | "7162315" | "7185090" | "7187947" | "7206367" | "7209795" | "7218708" | "7281034" | "7293060" | "7295548" | "7312785" | "7324857" | "7333519" | "7358960" | "7372846" | "7392102" | "7483958" | "7574274" | "7630501" | "7657644" |	US-PGPUB; USPAT	OR	ON	2017/04/18 11:24

		"7668990" | "7669219" | "7675943" | "7676142" | "7702279" | "7720096" | "7788138" | "7805682" | "7885622" | "7921369" | "7934239" | "7987294" | "7996566" | "8074253" | "8086752" | "8112032" | "8131390" | "8169938" | "8290603" | "8315555" | "8370678" | "8423659" | "8483853" | "8521316" | "8588949" | "8613385" | "8666826" | "8775546" | "8843500" | "8892648" | "9052810" | "9137564" | "9246866" | "9247363" | "9344292" | "9489383" | "9510055").PN.				
S1411	300	S1409 S1410	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:24
S1412	46	S1408 and S1411	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:24
S1413	4,569	((G05B15/02 OR G06F3/165 OR G06Q50/01 OR H04L65/403).CPC. and (700/94 OR 709/204).CCLS.)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/18 11:25
S1414	20	("853790" "892230").ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 07:01
S1415	4	"20090290064" "20120053714"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 09:03
S1416	14	"729355".ap.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/04/19 13:25

			DERWENT			
S1417	1	"20150363411" and mix$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 13:26
S1418	1	"20150363411" and mix$4 and buffer$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 13:41
S1419	0	"20150363411" and each	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 13:53
S1420	4	"20090290064" "20120053714"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 14:47
S1421	388	(multi$5zone multi$6 near2 (device player zone)) and sonos.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 14:58
S1422	377	(multi$5zone multi$6 near2 (device player zone)) and sonos.as. and @ad<="20160523"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 14:59
S1423	1	"737199".ap. and graphic$6 same stor$6	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/04/19 15:01

			DERWENT			
S1424	1	(multi$5zone multi$6 near2 (device player zone)) and sonos.as. and "20160364206"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:03
S1425	2	(multi$5zone multi$6 near2 (device player zone)) and "20160364206"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:04
S1426	2	(multi$5zone multi$6 near2 (device player zone)) and 8483853/.pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:05
S1427	2	(multi$5zone multi$6 near2 (device player zone)) and "8483853".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:05
S1428	622	(multi$5zone multi$6group$4 multi$6 near2 (device group$5 player zone)) near5 (group$6 scene) and sonos	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:06
S1429	120	(multi$5zone multi$6group$4 multi$6 near2 (device group$5 player zone)) near5 (group$6 scene) and sonos.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:11
S1430	112	(multi$5zone multi$6group$4 multi$4 near2 (device group$5 player zone)) near5 (group$6 scene) and sonos.as.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/04/19 15:12

			DERWENT			
S1431	0	(multi$5zone multi$6group$4 multi$4 near2 (device group$5 player zone)) near5 (group$6 scene) and "sonos."	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:12
S1432	594	(multi$5zone multi$6group$4 multi$4 near2 (device group$5 player zone)) near5 (group$6 scene) and "sonos"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:12
S1433	74	"8290603"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:13
S1434	3	"8290603".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:13
S1435	482	S1432 not S1430	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:15
S1436	373	S1432 not S1430 and @ad<="20150611"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:15
S1437	373	S1432 not S1430 and @ad<="20150611"	US-PGPUB; USPAT; EPO; JPO;			

			DERWENT			
S1438	3	S1432 not S1430 and 715/716.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:16
S1439	0	S1432 not S1430 and "478946".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:18
S1440	2	S1430 and "478946".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:19
S1441	112	S1430	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:19
S1442	112	S1430	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:19
S1443	9	"505966".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/19 15:42
S1444	191	(dolby$e dolby adj e)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/04/20 12:27

			DERWENT			
S1445	615	(dolby$e dolby adj e mdct) and (sub$fram$5 sub adj fram$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:29
S1446	149	(dolby$e dolby adj e mdct)same (sub$fram$5 sub adj fram$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:34
S1447	150	(dolby$e dolby adj e mdct)same (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:35
S1448	5	("6188987" | "6690428" | "7912045" | "20110040396" | "20130246077").PN.	US-PGPUB; USPAT	OR	ON	2017/04/20 12:36
S1449	0	S1447 and S1448	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:36
S1450	2	S1448 and (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:36
S1451	10	"822168".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:20
S1452	1	subframe and "20150348558"	US-PGPUB;	OR	ON	2017/04/20 15:20

			USPAT; EPO; JPO; DERWENT			
S1453	1	bits with subframe and "20150348558"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:20
S1454	1	guard and "20150348558"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:37
S1455	3	(dolby$e dolby adj e mdct)same (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5)) same guard	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:40
S1456	3	(dolby$e dolby adj e mdct)same (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5)) and guard	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:42
S1457	1	(dolby$e dolby adj e mdct) same guard same supplement$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:43
S1458	1	(dolby$e dolby adj e mdct) and guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:43
S1459	150	sonos.as. and (party adj mode party$mode)	US-PGPUB; USPAT;	OR	ON	2017/04/20 15:48

			EPO; JPO; DERWENT			
S1460	2	sonos.as. and (party adj mode party$mode).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:48
S1461	2	sonos.as. and (party adj mode party$mode) same icon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:49
S1462	15,055	guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:51
S1463	1,940	(guard$band guard adj band) same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:51
S1464	10	(dolby aes$4) and (guard$band guard adj band) same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:51
S1465	5	("6188987" | "6690428" | "7912045" | "20110040396" | "20130246077").PN.	US-PGPUB; USPAT	OR	ON	2017/04/20 17:14
S1466	1	guard and "20150348558"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14

S1467	3	(dolby$e dolby adj e mdct)same (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5)) same guard	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1468	3	(dolby$e dolby adj e mdct)same (sub$fram$5 sub$segment$5 sub adj (segment$5 fram$5)) and guard	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1469	1	(dolby$e dolby adj e mdct) same guard same supplement$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1470	1	(dolby$e dolby adj e mdct) and guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1471	150	sonos.as. and (party adj mode party$mode)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1472	2	sonos.as. and (party adj mode party$mode).clm.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:14
S1473	152	S1466 S1467 S1468 S1469 S1470 S1471 S1472	US-PGPUB; USPAT	OR	ON	2017/04/20 17:14
S1474	15,055	guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2017/04/20 17:15

			DERWENT			
S1475	1,940	(guard$band guard adj band) same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:15
S1476	10	(dolby aes$4) and (guard$band guard adj band) same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:15
S1477	13,869	S1475 S1476 S1474	US-PGPUB; USPAT	OR	ON	2017/04/20 17:15
S1478	9	"505966".ap.	US-PGPUB; USPAT	OR	ON	2017/04/21 08:37
S1504	8	"2101795".did.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:09
S1505	0	dugging adj translating	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:10
S1506	1	dubbing adj translating	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:10
S1507	1	dubbing with translating with soundtrack	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:10
S1508	3	"20140135962"	US-PGPUB; USPAT;	OR	ON	2017/04/21 17:13

			EPO; DERWENT			
S1509	5	"9715926"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:26
S1510	1	"453343".ap. and retriev$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 17:28
S1511	2	"20140135962" and (tone speed pitch)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 18:27
S1513	8	"2101795".did.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:37
S1514	0	dugging adj translating	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:37
S1515	1	dubbing adj translating	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:37
S1516	1	dubbing with translating with soundtrack	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:37
S1517	3	"20140135962"	US-PGPUB; USPAT; EPO;	OR	ON	2017/04/21 21:37

			DERWENT			
S1520	5	"9715926"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:40
S1521	1	"453343".ap. and retriev$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:40
S1522	2	"20140135962" and (tone speed pitch)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:40
S1524	6	("20090238377" | "20110058683" | "20120284023" | "5625697" | "8031853" | "8401178").PN.	US-PGPUB; USPAT	OR	ON	2017/04/22 07:50
S1533	0	sonos.as. and fourth adj command$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:37
S1534	19	sonos.as. and fourth near3 (player zone command$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:37
S1535	14	"737199".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:37
S1536	2	"20160364206"	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:39
S1537	13	"8290603" and fourth near3 (player zone command$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:41

S1538	0	"8290603".pn. and (second third fourth) near3 (player zone command$6) and fourth	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:41
S1539	1	"8290603".pn. and (second third fourth) near3 (player zone command$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:41
S1540	1	"8290603".pn. and (second third fourth) near3 (player zone command$6)and (second third fourth)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/03/12 13:43
S1541	2	("20130236029" | "20150286360").PN.	US-PGPUB; USPAT	OR	ON	2018/08/08 10:15
S1542	3,322	king.in. and language	US-PGPUB; USPAT	OR	ON	2018/08/08 10:37
S1543	12	king.in. and language and soundtrack	US-PGPUB; USPAT	OR	ON	2018/08/08 10:37
S1544	13,108	king.in. and varia$8	US-PGPUB; USPAT	OR	ON	2018/08/08 10:37
S1545	6	S1543 and S1544	US-PGPUB; USPAT	OR	ON	2018/08/08 10:37
S1546	19	king.in. and soundtrack	US-PGPUB; USPAT	OR	ON	2018/08/08 10:39
S1547	7	king.in. and soundtrack not S1543	US-PGPUB; USPAT	OR	ON	2018/08/08 10:39
S1548	1,288	king.in. and dub$4 overdub$6	US-PGPUB; USPAT	OR	ON	2018/08/08 10:40
S1549	522	king.in. and (dub$4 overdub$6)	US-PGPUB; USPAT	OR	ON	2018/08/08 10:40
S1550	38	king.in. and (dub$4 overdub$6) and adobe	US-PGPUB; USPAT	OR	ON	2018/08/08 10:40

S1551	428	logan.in. and character and varia$6	US-PGPUB; USPAT	OR	ON	2018/08/08 10:43
S1552	4	"228812".ap. and third	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 12:59
S1553	2	"629937".ap. and determin$8 with pair$5 and pair$6 same (type kind)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 13:09
S1554	3	"629937".ap. and determin$8 with pair$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 13:10
S1555	0	"629937".ap. and determin$8 with type	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 13:11
S1556	9	("853740" "013740" "083499" "299847").ap. and pair$6 same (type kind)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 13:11
S1557	0	"20130243199" and third	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:01
S1558	4	"228812".ap. and third	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/08 14:01

			DERWENT			
S1559	1	"228812".ap. and nickname	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:11
S1560	1	"228812".ap. and nick$name	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:11
S1561	2	"228812".ap. and name	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:21
S1562	4	("013740").ap. and nam$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:25
S1563	0	("013740").ap. and micknam4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:26
S1564	2	("013740").ap. and nicknam4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:26
S1565	6	("853790").ap. and (nam$4 nick$name)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/08 14:26

			DERWENT			
S1618	71	baudino.in. and group$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/09 19:46
S1619	5	baudino.in. and group$6 same play$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/09 19:46
S1620	3	"487686".ap. and player	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 07:56
S1621	3	"8290603".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 11:52
S1622	15	"737199".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 11:55
S1623	436	sonos.as. and @pd<="20140611"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 11:57
S1624	22	sonos.as. and @pd<="20140611" and sav$6 with group$6	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/10 11:57

			DERWENT			
S1625	10	sonos.as. and @pd<="20140611" and sav$6 with display$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 11:59
S1626	1	"8290603".pn. and link$6 same (stor$6 sav$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 12:04
S1627	3	"20150286360" and (stor$6 sav$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 12:09
S1628	2	("20150286360" "7571014" "8290603").pn. and (nam$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 12:54
S1629	6	S1622 and (nam$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 12:55
S1630	191	("000None" | "20020026442" | "20020124097" | "6757517" | "7130616" | "8103009" | "20030185400" | "20040037433" | "20130339397" | "20150245138" | "7921369" | "9246866" | "6404811" | "6778869" | "7130608" | "8234395" | "20120121105" | "8971546" | "20030157951" | "7657910" | "20080152312" | "20090179867" | "20130331970" | "20150286360" | "20160180248" | "7571014" | "7630501" | "8483853" | "5761320" | "6469633" | "8423893" | "5923902" | "6631410" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 13:46

		"7483538" | "20050021590" | "20090076881" | "20100017714" | "20100325239" | "20140037107" | "20140230015" | "20150237409" | "20100115562" | "20040024478" | "6256554" | "7143939" | "7236773" | "20030063755" | "20120054278" | "20130111347" | "20140310058" | "7295548" | "20130080955" | "20130253679" | "6522886" | "8014423" | "8045952" | "20140181659" | "20150186110" | "8843500" | "6032202" | "20130014015" | "20130223642" | "8762565" | "8965544" | "20010042107" | "20070142944" | "7853341" | "20040223622" | "20090234476" | "20140122590" | "5440644" | "7987294" | "20130238108" | "20020022453" | "6611537" | "7571014" | "7643894" | "20040228367" | "20080177822" | "20130317635" | "20150179227" | "20160026429" | "5361381" | "8290603" | "8554347" | "8903526" | "20150092959").PN.				
S1631	7	("20150286360" "7571014" "8290603").pn. and S1630	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 13:54
S1632	0	"20080077261" and network$6 and interfac$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 14:21
S1633	2	"20080077261" and network$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 14:21
S1634	0	S1630 and korhonen.in.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/10 14:21

			DERWENT			
S1635	0	S1630 and korhonen	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 14:26
S1636	28	korhonen and sonos.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 14:26
S1637	9	"20080045140"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 14:27
S1638	1	"20080077261" and stream$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:24
S1639	2	"20080077261" and (MEMORY STOR$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:27
S1640	2	"20080077261" and (MEMORY STOR$4 ram)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:27
S1641	0	"20080077261" and join	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/11 14:29

			DERWENT			
S162	1	"20080077261" and join$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:29
S163	1	"20080077261" and (frequency eq equal$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:31
S164	1	"20080077261" and (leav$4 enter$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:37
S165	1	"20080077261" and (separate channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:40
S166	0	"20080077261" and (output$4 near5 audio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
S167	0	"20080077261" and (output$4 same (channel audio stream$4))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
S168	0	"20080077261" and (output$4)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/11 14:42

			DERWENT			
S1649	2	"20080077261" and (playback$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
S1650	2	"20080077261" and (deliver$6 stream$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:43
S1651	1	"20080077261" and (stream$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:45
S1652	3	shdema.in. and (stream$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:49
S1653	200	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" | "20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" |	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

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		"6778493" | "6778869" | "6803964" |				
		"6809635" | "6816510" | "6816818" |				
		"6823225" | "6826283" | "6836788" |				
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		"6898642" | "6901439" | "6907458" |				
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		"6917592" | "6919771" | "6920373" |				
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S1658	4	"20080077261" "20020072816"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:40
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S1660	2	"487686".ap. and (stereo two) near3 channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:49

S1661	10	("629937" "299847" "083499" "013740" "853790" "487686").ap. and (stereo two) near3 channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:50
S1662	1	S1658 and (stereo two) near3 channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:51
S1663	3	S1658 and (stereo two)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:54
S1664	3	S1658 and (surround)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:00
S1665	6	("629937" "299847" "083499" "013740" "853790" "487686").ap. and consolid$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:01
S1666	12	("629937" "299847" "083499" "013740" "853790" "487686").ap. and button	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:02
S1667	3	S1658 and wireless$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:04

S1668	1	S1658 and center	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:07
S1669	3	S1658 and surround	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 12:07
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		"7324857" | "7330875" | "7333519" |				
		"7346332" | "7356011" | "7359006" |				
		"7366206" | "7372846" | "7391791" |				
		"7392102" | "7392481" | "7400644" |				
		"7412499" | "7424267" | "7428310" |				
		"7430181" | "7457948" | "7472058" |				
		"7474677" | "7483538" | "7483540" |				
		"7483958" | "7490044" | "7492912" |				
		"7505889" | "7509181" | "7519188" |				
		"7519667" | "7539551" | "7548744" |				
		"7548851" | "7558224" | "7558635" |				
		"7561932" | "7571014" | "7574274" |				
		"7599685" | "7606174" | "7626952" |				
		"7627825" | "7630500" | "7630501" |				
		"7631119" | "7643894" | "7653344" |				
		"7657224" | "7657644" | "7657910" |				
		"7665115" | "7668990" | "7669113" |				
		"7669219" | "7672470" | "7675943" |				
		"7676044" | "7676142" | "7688306" |				
		"7689304" | "7689305" | "7702279" |				
		"7702403" | "7710941" | "7711774" |				
		"7720096" | "7721032" | "7742740" |				
		"7742832" | "7743009" | "7746906" |				
		"7761176" | "7765315" | "7792311" |				
		"7793206" | "7804972" | "7805210" |				
		"7817960" | "7827259" | "7831054" |				
		"7835689" | "7849181" | "7853341" |				
		"7865137" | "7882234" | "7885622" |				
		"7907819" | "7916877" | "7917082" |				
		"7933418" | "7934239" | "7945636" |				
		"7945708" | "7958441" | "7962482" |				
		"7966388" | "7987294" | "7995732" |				
		"7996566" | "7996588" | "8014423" |				
		"8015306" | "8020023" | "8023663" |				
		"8028038" | "8028323" | "8041062" |				
		"8045721" | "8045952" | "8050203" |				
		"8050652" | "8054987" | "8055364" |				
		"8063698" | "8074253" | "8086287" |				
		"8086752" | "8090317" | "8103009" |				
		"8111132" | "8112032" | "8116476" |				
		"8126172" | "8131389" | "8131390" |				
		"8135141" | "8139774" | "8144883" |				
		"8148622" | "8150079" | "8160281" |				
		"8169938" | "8170222" | "8170260" |				
		"8175292" | "8175297" | "8185674" |				
		"8189824" | "8194874" | "8204890" |				
		"8208653" | "8214447" | "8214740" |				
		"8214873" | "8218790" | "8229125" |				
		"8230099" | "8233029" | "8233632" |				

		"8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" | "8886347" | "8904066" | "8914559" | "8917877" | "8923997" | "8930006" | "8934647" | "8934655" | "8942252" | "8942395" | "8954177" | "8965544" | "8965546" | "8966394" | "8977974" | "8984442" | "9020153" | "9042556" | "9137602" | "9160965" | "9195258" | "9219959" | "9226073" | "9245514" | "9325286" | "9524098" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023").PN.				
S1674	87	("D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271" | "D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246" | "D430143" | "D431552" |	US-PGPUB; USPAT	OR	ON	2018/08/13 15:00

		"D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" | "D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "RE41608").PN.				
S1675	1,030	S1670 S1671 S1672 S1673 S1674	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:00
S1676	4	"20080077261" "20020072816"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:01
S1677	4	S1676	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:01
S1678	1,030	(S1670 S1671 S1672 S1673 S1674) and S1675	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:01
S1679	2	(S1670 S1671 S1672 S1673 S1674) and S1676	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:01
S1680	38,744	(auto$4sens$4 (automati$6 input$6) near4 sens$6) same (config$8 scene zone	US-PGPUB;	OR	ON	2018/08/14 13:07

		group$4) and (synchroniz$8 synchron$4 sync$3)	USPAT; EPO; JPO; DERWENT			
S1681	0	"214234".ap. and button same (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/14 13:33
S1682	13	"514488".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/15 15:18
S1683	0	"214234".ap. and button and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:43
S1684	2	"214234".ap. and button	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:43
S1685	1	"214324".ap. and button and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:45
S1686	1	"214324".ap. and button same (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:45
S1687	33	sonos.as. and button same (sync synchron$8)	US-PGPUB; USPAT;	OR	ON	2018/08/16 14:59

			EPO; JPO; DERWENT			
S1688	6	sonos.as. and button same (sync synchron$8) and @pd<="20130723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:59
S1689	1	sonos.as. and button same (sync synchron$8) and push$6 and @pd<="20130723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:02
S1690	0	"20080177822" and push$6 and @pd<="20130723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:03
S1691	0	"20080177822" and push$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:03
S1692	19	push$6hold$4 and push near4 releas$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:03
S1693	2,514	(push$4 near3 hold$4 push$6hold$4) same (push$4 near4 releas$4 push$4releas$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:04
S1694	72	(push$4 near3 hold$4 push$6hold$4) same (push$4 near4 releas$4 push$4releas$4) and ($6media audio a/v digital) near3 (play$4)	US-PGPUB; USPAT; EPO;			

			JPO; DERWENT			
S1695	58	S1694 and @pd<="20130723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/16 15:09
S1697	1	((push$4 near3 hold$4 push$6hold$4) (push$4 near4 releas$4 push$4releas$4)) and "214324".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 11:31
S1698	1	"088944".ap. and gps	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:07
S1699	100	(US-20060223518-$ or US-9442564-$ or US-20110055255-$ or US-7116789-$ or US-20150020003-$ or US-7409218-$ or US-20110083111-$ or US-20040125044-$ or US-20060256074-$ or US-6772195-$ or US-7219303-$ or US-20020123327-$ or US-20060030339-$ or US-6784901-$ or US-20060012814-$ or US-6519454-$ or US-20030217150-$ or US-20020169539-$ or US-6912384-$ or US-20080244704-$ or US-20010034661-$ or US-6292671-$ or US-20060035647-$ or US-20020151316-$ or US-20060221968-$ or US-6633759-$ or US-5890064-$ or US-6993564-$ or US-6615134-$ or US-20030005439-$ or US-20050091359-$ or US-20080043040-$ or US-20080065505-$ or US-20080262910-$ or US-20080290987-$ or US-20090217171-$ or US-6504503-$ or US-6718503-$ or US-20080129688-$ or US-20060045294-$ or US-20150116316-$ or US-20140313295-$ or US-20090147993-$ or US-20100149073-$ or US-20150005587-$ or US-20150046116-$ or US-20150223725-$ or US-20160128587-$ or US-20110238755-$ or US-20060007151-$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:15

S1700	6,720,100	(gps geograph$6 timestamp pts)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:15
S1701	5,755,753	$6phone hand$3held hand near3 (held hold$4) assist$6 pda	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:16
S1702	473,241	(gps timestamp$4 pts) same (distance orient$6 position$4 spatial$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:18
S1703	26	S1702 and S1699	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:19
S1704	368	hrtf and S1702	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:19
S1705	1	S1703 and S1704	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:19
S1706	405	(gps timestamp$4 pts) with (head$4track$4 head near4 track$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:20

S1707	21	(origo origio) with S1700	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:22
S1708	0	(origo origio) with S1700 with S1701	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:22
S1709	1	("2014/0219485").URPN.	USPAT	OR	ON	2018/08/17 13:23
S1710	1,122,522	hrtf head with (locat$6 position$4 orient$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:24
S1711	1,142,415	hrtf head with (locat$6 position$4 orient$6 observ$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:25
S1712	92	(origo origio) and S1700	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:25
S1713	19,373,992	(gps geograph$6 timestamp pts position$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:26
S1714	18,047,499	(gps geograph$6 time$3stamp$4 pts position positioning)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/17 13:29

			DERWENT			
S1715	519	(origo origio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1716	120	S1714 same S1715	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1717	100	(US-20060223518-$ or US-9442564-$ or US-20110055255-$ or US-7116789-$ or US-20150020003-$ or US-7409218-$ or US-20110083111-$ or US-20040125044-$ or US-20060256074-$ or US-6772195-$ or US-7219303-$ or US-20020123327-$ or US-20060030339-$ or US-6784901-$ or US-20060012814-$ or US-6519454-$ or US-20030217150-$ or US-20020169539-$ or US-6912384-$ or US-20080244704-$ or US-20010034661-$ or US-6292671-$ or US-20060035647-$ or US-20020151316-$ or US-20060221968-$ or US-6633759-$ or US-5890064-$ or US-6993564-$ or US-6615134-$ or US-20030005439-$ or US-20050091359-$ or US-20080043040-$ or US-20080065505-$ or US-20080262910-$ or US-20080290987-$ or US-20090217171-$ or US-6504503-$ or US-6718503-$ or US-20080129688-$ or US-20060045294-$ or US-20150116316-$ or US-20140313295-$ or US-20090147993-$ or US-20100149073-$ or US-20150005587-$ or US-20150046116-$ or US-20150223725-$ or US-20160128587-$ or US-20110238755-$ or US-20060007151-$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1718	473,241	(gps timestamp$4 pts) same (distance orient$6 position$4 spatial$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1719	26	S1718 and S1717	US-PGPUB;	OR	ON	2018/08/17 13:30

			USPAT; EPO; JPO; DERWENT			
S1720	1,139,342	hrtf head with (locat$6 position$4 orient$6) gaz$3 with (track$6 determin$5 direct$6 locat$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:32
S1721	1,507,237	hrtf head with (locat$6 position$4 direct$4 determin$5 orient$6) gaz$3 with (track$6 determin$5 direct$6 locat$6 position$4 orient$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:32
S1722	56	S1715 and S1721	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:40
S1723	100	(US-20060223518-$ or US-9442564-$ or US-20110055255-$ or US-7116789-$ or US-20150020003-$ or US-7409218-$ or US-20110083111-$ or US-20040125044-$ or US-20060256074-$ or US-6772195-$ or US-7219303-$ or US-20020123327-$ or US-20060030339-$ or US-6784901-$ or US-20060012814-$ or US-6519454-$ or US-20030217150-$ or US-20020169539-$ or US-6912384-$ or US-20080244704-$ or US-20010034661-$ or US-6292671-$ or US-20060035647-$ or US-20020151316-$ or US-20060221968-$ or US-6633759-$ or US-5890064-$ or US-6993564-$ or US-6615134-$ or US-20030005439-$ or US-20050091359-$ or US-20080043040-$ or US-20080065505-$ or US-20080262910-$ or US-20080290987-$ or US-20090217171-$ or US-6504503-$ or US-6718503-$ or US-20080129688-$ or US-20060045294-$ or US-20150116316-$ or US-20140313295-$ or US-20090147993-$ or US-20100149073-$ or US-20150005587-$ or US-20150046116-$ or US-20150223725-$ or	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:34

		US-20160128587-$ or US-20110238755-$ or US-20060007151-$).did.				
S1724	114,280	(gps timestamp$4 pts) and S1721	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:34
S1725	12	S1723 and S1724	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:34
S1726	212,201	(gps timestamp$4 pts coordinate longitude latitude) and S1721	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:36
S1727	18	S1723 and S1726	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:36
S1728	1,507,237	hrtf head with (locat$6 position$4 direct$4 determin$5 orient$6) gaz$3 with (track$6 determin$5 direct$6 locat$6 position$4 orient$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:41
S1729	1,120,682	(gps timestamp time adj stamp pts coordinate longitude latitude position positioning) and S1728	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:41
S1730	55	(origo origio) and S1729	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/17 14:42

			DERWENT			
S1731	100	(US-20060223518-$ or US-9442564-$ or US-20110055255-$ or US-7116789-$ or US-20150020003-$ or US-7409218-$ or US-20110083111-$ or US-20040125044-$ or US-20060256074-$ or US-6772195-$ or US-7219303-$ or US-20020123327-$ or US-20060030339-$ or US-6784901-$ or US-20060012814-$ or US-6519454-$ or US-20030217150-$ or US-20020169539-$ or US-6912384-$ or US-20080244704-$ or US-20010034661-$ or US-6292671-$ or US-20060035647-$ or US-20020151316-$ or US-20060221968-$ or US-6633759-$ or US-5890064-$ or US-6993564-$ or US-6615134-$ or US-20030005439-$ or US-20050091359-$ or US-20080043040-$ or US-20080065505-$ or US-20080262910-$ or US-20080290987-$ or US-20090217171-$ or US-6504503-$ or US-6718503-$ or US-20080129688-$ or US-20060045294-$ or US-20150116316-$ or US-20140313295-$ or US-20090147993-$ or US-20100149073-$ or US-20150005587-$ or US-20150046116-$ or US-20150223725-$ or US-20160128587-$ or US-20110238755-$ or US-20060007151-$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:43
S1732	25	S1729 and S1731	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:44
S1733	0	origo$3determin$5 origo$3direct$6 origo$3locat$6 origo$3position$4 origo$3orient$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:51
S1734	519	(origo origio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:51
S1735	468	(origo)	US-PGPUB;	OR	ON	2018/08/17 14:51

			USPAT; EPO; JPO; DERWENT			
S1736	100	(US-20060223518-$ or US-9442564-$ or US-20110055255-$ or US-7116789-$ or US-20150020003-$ or US-7409218-$ or US-20110083111-$ or US-20040125044-$ or US-20060256074-$ or US-6772195-$ or US-7219303-$ or US-20020123327-$ or US-20060030339-$ or US-6784901-$ or US-20060012814-$ or US-6519454-$ or US-20030217150-$ or US-20020169539-$ or US-6912384-$ or US-20080244704-$ or US-20010034661-$ or US-6292671-$ or US-20060035647-$ or US-20020151316-$ or US-20060221968-$ or US-6633759-$ or US-5890064-$ or US-6993564-$ or US-6615134-$ or US-20030005439-$ or US-20050091359-$ or US-20080043040-$ or US-20080065505-$ or US-20080262910-$ or US-20080290987-$ or US-20090217171-$ or US-6504503-$ or US-6718503-$ or US-20080129688-$ or US-20060045294-$ or US-20150116316-$ or US-20140313295-$ or US-20090147993-$ or US-20100149073-$ or US-20150005587-$ or US-20150046116-$ or US-20150223725-$ or US-20160128587-$ or US-20110238755-$ or US-20060007151-$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 16:31
S1737	13	"088944".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 13:40
S1738	2	"6489901".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 13:53
S1739	3	"20080314232"	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/21 16:12

			DERWENT			
S1740	2	"20080314232" and analy$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 16:13
S1741	2	"20080314232" and analy$8 and index$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 16:13
S1742	34	jehan.in. and tristan	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 16:22
S1743	72	(push$4 near3 hold$4 push$6hold$4) same (push$4 near4 releas$4 push$4releas$4) and ($6media audio a/v digital) near3 (play$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:04
S1744	1	"214324".ap. and S1743	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:05
S1745	2	sonos.as. and sequent$8 with indicat$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:27
S1746	1,227	playback near3 device and sequent$8 with indicat$6	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/21 17:27

			DERWENT			
S1747	1,363	(playback near3 device zone near3 play$4) and sequent$8 with indicat$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:27
S1748	784	(playback near3 device zone near3 play$4) and sequent$8 with indicat$6 and (sync synchron$7)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:28
S1749	615	(playback near3 device zone near3 play$4) and sequent$8 with indicat$6 and (sync synchron$7) and @pd<="20140723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:28
S1750	568	(playback near3 device zone near3 play$4) and sequent$8 with indicat$6 and (sync synchron$7) and @pd<="20130723"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:29
S1751	1	"496877".ap. and audio.ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 08:32
S1752	11	"20130333055" "20020184189" "9317486"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:32
S1753	7	("20130333055" "20020184189" "9317486").pn.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/22 10:32

			DERWENT			
S1754	5	("20130333055" "20020184189" "9317486").pn. and (bookmark$4 paus$4 locat$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:33
S1755	5	("20130333055" "20020184189" "9317486").pn. and (bookmark$4 paus$4 locat$6) same user	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:33
S1756	4	("20130333055" "20020184189" "9317486").pn. and (portion chapter)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:36
S1757	0	("7210102" "8150864").pn. and (book$mark$4 mark$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:46
S1758	1	("7210102" "8150864").pn. and (position)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:46
S1759	5	("7925993" "20120197998" "20120324324" "20120245720" "7210102" "8150864").pn. and (book$4mark mark$6 paus$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 10:52
S1760	12	"583553".ap.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/08/22 12:18

			DERWENT			
S1761	2	"20170235545"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 12:19
S1762	34,078	((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 12:19
S1763	0	"s598" and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 12:21
S1775	228	("20010042107" | "20010043456" | "20010050991" | "20020022453" | "20020026442" | "20020072816" | "20020072817" | "20020078293" | "20020098878" | "20020101357" | "20020124097" | "20020131761" | "20020137505" | "20020150053" | "20020165921" | "20020188762" | "20030014486" | "20030023329" | "20030043856" | "20030063755" | "20030073432" | "20030103088" | "20030157951" | "20030167335" | "20030179780" | "20030185400" | "20030198257" | "20030212802" | "20030219007" | "20030231208" | "20040001591" | "20040014426" | "20040015252" | "20040019807" | "20040023697" | "20040024478" | "20040031853" | "20040037433" | "20040042629" | "20040059842" | "20040081099" | "20040117462" | "20040136554" | "20040168081" | "20040171346" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040237750" | "20040239816" | "20040249490" | "20040252400" | "20040253969" | "20050060435" |	US-PGPUB; USPAT	OR	ON	2018/08/22 12:45

		"20050100174" | "20050131558" | "20050154766" | "20050160270" | "20050197725" | "20050201549" | "20050281138" | "20060029005" | "20060072489" | "20060089735" | "20060173844" | "20060173972" | "20060205349" | "20060222186" | "20060227985" | "20060229752" | "20060259649" | "20060270395" | "20070003067" | "20070005160" | "20070087686" | "20070142944" | "20070265031" | "20080075295" | "20080077261" | "20080092204" | "20080144864" | "20080146289" | "20080152165" | "20080205070" | "20080215169" | "20080216125" | "20080303947" | "20090011798" | "20090070434" | "20090124289" | "20090251604" | "20100054709" | "20100087089" | "20100142735" | "20100274372" | "20110001632" | "20110002487" | "20110170710" | "20110228944" | "20110316768" | "20120051558" | "20120051567" | "20120127831" | "20120148075" | "20120263325" | "20120275624" | "20120288126" | "20130010970" | "20130022221" | "20130028443" | "20130129122" | "20130259254" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" | "20140256260" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "20150365987" | "3956591" | "4105974" | "4306114" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4824059" | "4845751" | "4994908" | "4995778" | "5086385" | "5151922" | "5182552" | "5237327" | "5272757" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5481251" | "5515345" | "5553147" | "5553314" | "5625350" | "5640388" | "5661665" | "5740235" | "5742623" | "5761320" | "5774016" | "5790543" | "5812201" | "5818948" | "5832024" | "5848152" | "5852722" | "5875233" | "5905768" | "5910991" | "5923902" | "5946343" | "5956025" | "5960006" |			

		"5984512" | "5987611" | "5990884" | "5991307" | "5999906" | "6018376" | "6029196" | "6032202" | "6038614" | "6046550" | "6061457" | "6081266" | "6088063" | "6101195" | "6127941" | "6148205" | "6169725" | "6181383" | "6195435" | "6212282" | "6246701" | "6256554" | "6269406" | "6301012" | "6310652" | "6313879" | "6321252" | "6353172" | "6356871" | "6404811" | "6418150" | "6442443" | "6449642" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6522886" | "6535121" | "6611537" | "6631410" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6697687" | "6704421").PN.				
S1776	240	("6741961" | "6757517" | "6778073" | "6778869" | "6809635" | "6816510" | "6826283" | "6859460" | "6859538" | "6873862" | "6882335" | "6901439" | "6915347" | "6919771" | "6931557" | "6937988" | "6987767" | "6999827" | "7046677" | "7072477" | "7092528" | "7092694" | "7096169" | "7120168" | "7130316" | "7130608" | "7130616" | "7136934" | "7139981" | "7143939" | "7146260" | "7161939" | "7197148" | "7206618" | "7218708" | "7236773" | "7260616" | "7263110" | "7277547" | "7289631" | "7295548" | "7302468" | "7305694" | "7308188" | "7324857" | "7356011" | "7366206" | "7391791" | "7428310" | "7430181" | "7457948" | "7472058" | "7483538" | "7490044" | "7492912" | "7505889" | "7519188" | "7539551" | "7548744" | "7548851" | "7558224" | "7558635" | "7571014" | "7627825" | "7630500" | "7630501" | "7643894" | "7653344" | "7657910" | "7675943" | "7676044" | "7676142" | "7688306" | "7710941" | "7721032" | "7728911" | "7746906" | "7761176" | "7831054" | "7853341" | "7882234" | "7908637" | "7930644" | "7933418" | "7945636" | "7945708" | "7966388" | "7987294" | "7995732" | "8014423" | "8041062" | "8045952" | "8050203" | "8054987" | "8055363" | "8063698" | "8103009" | "8139774" | "8150079" | "8160281" | "8170222" | "8175292" | "8229125" | "8233029" | "8233632" |	US-PGPUB; USPAT	OR	ON	2018/08/22 12:45

		"8234395" | "8238578" | "8243961" | "8265310" | "8275307" | "8290185" | "8306235" | "8311226" | "8325935" | "8331585" | "8345891" | "8374595" | "8391501" | "8411883" | "8423893" | "8442239" | "8452020" | "8472633" | "8477958" | "8483853" | "8521316" | "8565455" | "8577045" | "8600075" | "8600084" | "8620006" | "8639370" | "8654995" | "8855319" | "8861739" | "8879761" | "8914559" | "8934647" | "8934655" | "8938312" | "8942252" | "8942395" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556" | "9195258" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023" | "D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271" | "D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246" | "D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" | "D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375").PN.				
S1820	5,210	group$5 near3 (level gain fader adjust$4 volume) near4 averag$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:32

S1821	4,887	group$5 near3 (level gain fader volume) near4 averag$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:33
S1822	58	group$5 near3 (level gain fader volume) near4 averag$4 with adjust$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:33
S1823	1	S1820 and 381/119.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:34
S1824	23	S1820 and "381".clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:36
S1825	19	S1820 and "704".clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:37
S1826	5	S1820 and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:37
S1827	43	group$5 near3 (level gain fader volume) near4 averag$4 same (audio sound music mixer fader)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:40

S1828	0	master near3 fader with (level gain volume) near4 averag$4 same (audio sound music mixer)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:43
S1829	2	fader with (level gain volume) near4 averag$4 same (audio sound music mixer)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:43
S1830	462	group$5 near3 (level gain fader volume) and (level gain fader volume)near4 averag$4 same (audio sound music mixer fader)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:44
S1831	47	group$5 near3 (level gain fader volume) and (level gain fader volume)near4 averag$4 same (audio sound music mixer fader) and @pd<="20040401"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/12 17:45
S1832	166	spotify and mood and motion	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:20
S1833	4,944	histor$6 with (motion$4 exercis$4 activ$5) with (parameter$5 metadata)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:20
S1834	4,944	histor$6 with (motion$4 exercis$4 activ$5) with (parameter$5 metadata id3$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:21

S1835	4	S1832 and S1834	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:21
S1836	6,431	histor$6 with (motion$4 exercis$4 activ$5 recent$4) with (parameter$5 metadata)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:22
S1837	1	S1836 and S1832 not S1835	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:22
S1838	2,914	histor$6 with (motion$4 exercis$4 activ$5) with (parameter$5 metadata) and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:23
S1839	10	"20060167943" "20140119564" "20140316305"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:26
S1840	0	S1839 and S1836	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:26
S1841	678	histor$6 with (motion$4 exercis$4 activ$5) with (metadata)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:26

S1842	826	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:27
S1843	744	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:27
S1844	339	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:28
S1845	339	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:29
S1846	210	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (motion$4 exercis$4 activ$5)same (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:32
S1847	267	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (motion$4 exercis$4 activ$5 metadata)same (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:32
S1848	225	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (motion$4 exercis$4 activ$5 metadata)same (rest$4 run$4 sit sitt$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:34

S1849	307	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (motion$4 exercis$4 activ$5 metadata)same (rest$4 run$4 sit sitt$4 climb$4 $3cycl$4 yoga)and user with (histor$5 recent$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:37
S1850	136	(recent$4 histor$6) with (motion$4 exercis$4 activ$5) with (metadata) and (motion$4 exercis$4 activ$5 metadata)same (rest$4 run$4 sit sitt$4 climb$4 $3cycl$4 yoga)and user with (histor$5 recent$6)and @pd<="20141230"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:38
S1851	1	(recent$4 histor$6) and "976462".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:39
S1852	96	(US-5594469-$ or US-20140119564-$ or US-20150362999-$ or US-20160193539-$ or US-20080077261-$ or US-20060167943-$ or US-20060212444-$ or US-20150181314-$ or US-20150182149-$ or US-20140316305-$ or US-20140275854-$ or US-20160029125-$ or US-20060060068-$ or US-20110015765-$ or US-20070204744-$ or US-20160042766-$ or US-20050275626-$ or US-20060107822-$ or US-20030076301-$ or US-6917373-$ or US-20030068053-$ or US-20030236582-$ or US-7348967-$ or US-20090276707-$ or US-20050021470-$ or US-6526411-$ or US-20070074619-$ or US-6389403-$ or US-6987221-$ or US-20030135464-$ or US-20010018858-$ or US-20030105718-$ or US-20070294710-$ or US-7293060-$ or US-20020116476-$ or US-20070250901-$ or US-20030089218-$ or US-20020082901-$ or US-6941324-$ or US-20080092047-$ or US-6587837-$ or US-6983371-$ or US-6418421-$ or US-6345256-$ or US-7206748-$ or US-7269564-$ or US-20050160270-$ or US-8122049-$ or US-20080076972-$ or US-20020019586-$).did.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:40
S1853	0	"808875.ap.",	US-PGPUB; USPAT; EPO;	OR	ON	2018/10/19 13:24

			JPO; DERWENT			
S1854	0	"808875".ap. and proport$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:24
S1855	6	"808875".ap. and averag$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:25
S1856	1	"808875".ap. and adjust$6 same group$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:25
S1857	1	"861653".ap. and (averag$6 proportion$4 adjust$6 same group$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:27
S1858	1	"861653".ap. and (averag$6 proportion$4) same adjust$6 same group$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:27
S1859	61	"861653"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 10:29
S1860	0	"861653" and "095145".ap.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/25 10:30

			DERWENT			
S1861	8	"861653" and averag$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 10:37
S1862	2	"20020124097"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 11:13
S1863	0	"20020124097" and averag$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 11:14
S1864	0	"20020124097" and vu	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 11:14
S1865	3	"861653".ap. and comput$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 11:50
S1866	2	shdema.in. and "20020072816"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:56
S1867	1	shdema.in. near2 yoav	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/25 15:57

			DERWENT			
S1868	1	shdema.in. near2 yoav and stereo	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:57
S1869	1	shdema.in. near2 yoav and surround	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:57
S1870	1	shdema.in. near2 yoav and surround and stereo	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:57
S1871	1	shdema.in. near2 yoav and surround and stereo and address$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:57
S1872	1	shdema.in. near2 yoav and surround and stereo and address$4 and adjust$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/25 15:58
S1873	4	pair$4 and "128443".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 10:17
S1874	11	"128443".ap.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 10:18

			DERWENT			
S1875	6	pair$4 and "629937".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 10:18
S1876	5	pair$4 and "013740".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 10:19
S1877	0	"5519641".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 11:56
S1878	3	"5519641".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 11:56
S1879	85	"5519641"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 11:56
S1880	2	"5519641".pn. and clock	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 11:56
S1881	0	"5519641".pn. and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 11:58

			DERWENT			
S1882	1	"5519641".pn. and (stereo surround$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:02
S1883	1	"20020072816" and (stereo surround$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:02
S1884	0	"20020072816" and (mono$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:10
S1885	1	"20020072816" and (stereo surround$4 channel) same address$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:16
S1886	0	"20020072816" and (stereo surround$4 channel) same address$6 and all	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:17
S1887	0	"5519641".pn. and mix$4 with channel$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:18
S1888	1	"5519641".pn. and mix$4	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 12:18

			DERWENT			
S1889	1	"20020072816" and mix$3	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:18
S1890	2	"5519641".pn. and channel$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:18
S1891	2	"5406634".pn. and mix$4 with channel$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:19
S1892	1	"5406634".pn. and mix$4 with channel$4 and (clock$4 sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:20
S1893	2	"861653".ap. and scheme	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:28
S1894	0	"861653".ap. and scheme same (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:28
S1895	2	"861653".ap. and scheme	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 12:28

			DERWENT			
S1896	1	"083499".ap. and scheme	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:29
S1897	1	("013740" "083499").ap. and scheme	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:31
S1898	3	("013740" "083499").ap. and synchron$9 with playback	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:31
S1899	343	381/17.ccls. and (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:51
S1900	814	(381/17,104-109 700/04).ccls. and (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:51
S1901	102	"7689305" and (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:52
S1902	1	"7689305".pn. and (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 12:52

			DERWENT			
S1903	97	"7689305" and (sync synchron$9) and clock$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:52
S1904	111	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) and clock$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:53
S1905	107	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) same clock$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:54
S1906	107	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) same clock$6 and (stereo surround channel $6channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:54
S1907	104	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) same clock$6 and (stereo surround channel $6channel) and address	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:57
S1908	2	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) same clock$6 and (stereo surround channel $6channel) and address not sonos.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 12:57
S1909	4	("7962482" "20020002039" "20020124097" "20040117044" "20040223622" "7689305") and (sync synchron$9) same clock$6 and (stereo surround channel $6channel) not sonos.as.	US-PGPUB; USPAT; EPO; JPO;			

			DERWENT			
S1910	123	("20010042107" | "20020002039" | "20020003548" | "20020022453" | "20020026442" | "20020072816" | "20020098878" | "20020124097" | "20020143547" | "20030020763" | "20030157951" | "20030167335" | "20030177889" | "20030198257" | "20040010727" | "20040015252" | "20040024478" | "20040117044" | "20040131192" | "20040147224" | "20040220687" | "20040223622" | "20040225389" | "20050002535" | "20050021470" | "20050100174" | "20050131558" | "20050144284" | "20050177256" | "20050254505" | "20050289224" | "20050289244" | "20060041616" | "20060149402" | "20060179160" | "20060205349" | "20060229752" | "20070142022" | "20070142944" | "20070189544" | "20070223725" | "20070288610" | "20080025535" | "20080045140" | "20080066094" | "20080066120" | "20080077261" | "20080092204" | "20080144861" | "20080152165" | "20080159545" | "20080162668" | "20090097672" | "20090228919" | "20090232326" | "20100010651" | "20100052843" | "20100153097" | "20100284389" | "20100299639" | "20120047435" | "20130253679" | "20130293345" | "5182552" | "5406634" | "5519641" | "5923902" | "5946343" | "6256554" | "6404811" | "6487296" | "6522886" | "6587127" | "6604023" | "6611537" | "6631410" | "6757517" | "6778869" | "6889207" | "7130608" | "7130616" | "7143939" | "7187947" | "7218708" | "7236773" | "7302468" | "7346332" | "7483538" | "7539551" | "7558224" | "7561932" | "7571014" | "7626952" | "7643894" | "7657910" | "7668990" | "7689305" | "7742832" | "7761176" | "7804972" | "7805210" | "7817960" | "7849181" | "7853341").PN. OR ("7962482" | "8014423" | "8045952" | "8054987" | "8086287" | "8103009" | "8135141" | "8189824" | "8233635" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8498726" |	US-PGPUB; USPAT; USOCR	OR	ON	2018/10/26 13:02

		"8588432" | "8700730" | "8843228").PN. OR ("9202509").URPN.				
S1911	81	("20020002039" | "20020003548" | "20020072816" | "20020124097" | "20030020763" | "20030167335" | "20030177889" | "20040010727" | "20040015252" | "20040117044" | "20040131192" | "20040223622" | "20040225389" | "20050002535" | "20050021470" | "20050131558" | "20050144284" | "20050289224" | "20060041616" | "20060149402" | "20070142022" | "20070142944" | "20070189544" | "20070288610" | "20080025535" | "20080045140" | "20080077261" | "20080144861" | "20080152165" | "5182552" | "5946343" | "6631410" | "6778869" | "7130608" | "7187947" | "7218708" | "7539551" | "7558224" | "7571014" | "7643894" | "7668990" | "7742832" | "7761176" | "7805210" | "7962482" | "8045952" | "8189824" | "8234395" | "8239559" | "8290603").PN. OR ("8788080").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2018/10/26 13:02
S1912	16	(S1910 S1911) and (sync synchron$9) same clock$6 and (stereo surround channel $6channel) not sonos.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 13:03
S1913	0	"5406634".pn. and mix$4 with channel$4 and (clock$4 same (sync synchron$9))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 17:29
S1914	1	"5406634".pn. and mix$4 with channel$4 and (clock$4 (sync synchron$9))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/26 17:29
S1915	2	"20020072816" and (time timing delay offset)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/27 13:31

			DERWENT			
S1916	2	"20020072816" and (time timing delay$4 offset$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:31
S1917	1	"20020072816" and (video image)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:37
S1918	1	"20020072816" and cross$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:43
S1919	1	"20020072816" and phas$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:44
S1920	0	"20020072816" and direct$6 with channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:48
S1921	1	"20020072816" and stereo with channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/27 13:49
S1950	3	"8938637".pn.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/12/03 08:51

			DERWENT			
S1951	2	("20040114771" | "20170188152").PN.	US-PGPUB; USPAT	OR	ON	2018/12/03 08:55
S1952	0	"14976658".ap.	US-PGPUB; USPAT	OR	ON	2018/12/03 09:09
S1953	11	"976658".ap.	US-PGPUB; USPAT	OR	ON	2018/12/03 09:09
S1954	0	"976658".ap. and nickname	US-PGPUB; USPAT	OR	ON	2018/12/03 09:09
S1955	1	"228812".ap. and nickname	US-PGPUB; USPAT	OR	ON	2018/12/03 09:12
S1956	5	("806070" "013740" "853790").ap. and nickname	US-PGPUB; USPAT	OR	ON	2018/12/03 09:13
S1957	0	"861653".ap. and proportion	US-PGPUB; USPAT	OR	ON	2018/12/03 11:16
S1958	0	"861653".ap. and proportion	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 11:16
S1959	9	"861653".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 11:16
S1960	35	("009182" "013740" "861653").ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 11:53
S1961	9	("009182" "013740" "861653").ap. and setting	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 11:53
S1962	6	("009182" "013740" "861653").ap. and group$5 with (volume setting)	US-PGPUB; USPAT;	OR	ON	2018/12/03 12:01

			DERWENT			
S1963	6	("009182" "013740" "861653").ap. and group$5 same (control$4 volume setting)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 12:04
S1964	6	("009182" "013740" "861653").ap. and correlat$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 17:15
S1965	1	shdema.in. and wireless and $6speaker	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 17:22
S1966	200	("20030210347" | "20040189363" | "20050102699" | "20060215741" | "20080212729" | "6816104" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020035621" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078293" | "20020080783" | "20020090914" | "20020093478" | "20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020124182" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194260" | "20020194309" | "20030002609" | "20030008616" | "20030014486" |	US-PGPUB; USPAT	OR	ON	2018/12/03 17:49

		"20030018797" | "20030020763" | "20030023741" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030050058" | "20030055892" | "20030061428" | "20030063528" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030109270" | "20030110329" | "20030118158" | "20030123853" | "20030126211" | "20030135822" | "20030157951" | "20030167335" | "20030172123" | "20030179780" | "20030182254" | "20030185400" | "20030187657" | "20030195964" | "20030198254" | "20030198255" | "20030198257" | "20030200001" | "20030204273" | "20030204509" | "20030210796" | "20030212802" | "20030219007" | "20030227478" | "20030229900" | "20030231208" | "20030231871" | "20030235304" | "20040001106" | "20040001484" | "20040001591" | "20040002938" | "20040008852" | "20040010727" | "20040012620" | "20040014426" | "20040015252" | "20040019497" | "20040019807" | "20040019911" | "20040023697" | "20040024478" | "20040024925" | "20040027166" | "20040032348" | "20040032421" | "20040032922" | "20040037433" | "20040041836" | "20040042629" | "20040044742" | "20040048569" | "20040059842" | "20040059965" | "20040066736" | "20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "20040117462" | "20040117491" | "20040117840" | "20040117858" | "20040128701" | "20040131192" | "20040133689" | "20040143368" | "20040143675" | "20040143852" | "20040148237" | "20040168081" | "20040170383" | "20040171346" | "20040177167" | "20040179554" | "20040183827" | "20040185773" | "20040203378" | "20040203590" | "20040208158" | "20040213230" | "20040223622" |			

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S1970	1	S1965 and (S1967 S1968 S1969 S1966)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 17:50
S1971	1	"405931".ap. and (theatre theater consolid$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/01 18:07
S1972	0	"405931".ap. and (audio near3 data8)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2019/01/01 18:11

			DERWENT			
S1973	1	"405931".ap. and (audio near3 data)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/01 18:11
S1974	5	("20040114771" | "20060045281" | "20130236029" | "20150286360" | "20170188152").PN.	US-PGPUB; USPAT	OR	ON	2019/01/01 18:15
S1975	2	"20070087686"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/01 18:18
S1976	1	"20170134855" and determin$6 same player	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 09:01
S1977	1	"20170134855" and determin$6 same (device playback player)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 09:01
S1978	14	"507433".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 09:10
S1979	2	"20170134855" and zone near2 play$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 10:36
S1980	1	"20170134855" and determin$6 same (pair$4 device playback player)	US-PGPUB;	OR	ON	2019/01/02 10:39

			USPAT; EPO; JPO; DERWENT			
S1981	1	"20020072816" and (stereo surround)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 12:11
S1982	1	"20020072816" and (sub "5.1")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 12:48
S1983	1	"507433".ap. and learn$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/04 10:03
S2138	166,138	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/02/22 14:29
S2211	2	("20060215741" | "20080212729").PN.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:38
S2212	2	"808875".ap. and synchron$8	US-PGPUB; USPAT	OR	ON	2019/03/01 16:39
S2213	1	"20160021479"	US-PGPUB; USPAT	OR	ON	2019/03/01 16:40
S2214	83,529	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:41

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S2479	1,506	"s298"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/06/06 19:47
S2480	9,237	"s98"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/06/06 19:48
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		"7209795" | "7218708" | "7236739" | "7236773" | "7257398" | "7260616" | "7263110" | "7277547" | "7286652" | "7289631" | "7293060" | "7295548" | "7302468" | "7305694" | "7308188" | "7310334" | "7312785" | "7313593" | "7319764" | "7324857" | "7330875" | "7333519" | "7346332" | "7356011" | "7359006" | "7366206" | "7372846" | "7391791" | "7392102" | "7392481" | "7400644" | "7412499" | "7424267" | "7428310" | "7430181" | "7457948" | "7472058" | "7474677" | "7483538" | "7483540" | "7483958" | "7490044" | "7492912" | "7505889" | "7509181" | "7519188" | "7519667" | "7539551" | "7548744" | "7548851" | "7558224" | "7558635" | "7561932" | "7571014" | "7574274" | "7599685" | "7606174" | "7626952" | "7627825" | "7630500" | "7630501" | "7631119" | "7643894" | "7653344" | "7657224" | "7657644" | "7657910" | "7665115" | "7668990" | "7669113" | "7669219" | "7672470" | "7675943" | "7676044" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" |			

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		"D412337" | "D415496" | "D416021" | "D420006" | "D429246" | "D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" | "D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "RE41608").PN.				
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S2546	3	"20050195999" and display$6 and (avail$6 operab$6 online activ$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:47
S2547	0	"20050195999" and sync$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:53
S2548	0	"20050195999" and synchron$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:53

S2549	0	"20050195999" and sync	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:53
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		"7702403" | "7710941" | "7711774" |				
		"7720096" | "7721032" | "7742740" |				
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		"7761176" | "7765315" | "7792311" |				
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S2743	3	"6526518".pn.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2019/10/14 11:26

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S2746	6	("20080250065" "20090217343" "20090106261").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/14 12:18
S2747	3	("20080250065" "20090217343" "20090106261").pn. AND (GPS LOCAT$6 POSITION$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/14 12:18
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S2749	85	("10028028" | "20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030063755" | "20030157951" | "20030185400" | "20040024478" | "20040037433" | "20040223622" | "20040228367" | "20050021590" | "20070142944" | "20080152312" | "20080177822" | "20090076881" | "20090179867" | "20090234476" | "20100017714" | "20100115562" | "20100325239" | "20120054278" | "20120121105" | "20130014015" | "20130080955" | "20130111347" | "20130223642" | "20130238108" | "20130253679" | "20130317635" | "20130331970" | "20130339397" | "20140122590" | "20140230015" | "20140310058" | "20150092959" | "20150179227" | "20150186110" | "20150212788" | "20150237409" | "20150245138" | "20150286360" | "20160026429" | "20160180248" | "5361381" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7921369" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8290603" | "8423893" | "8483853" | "8554347" | "8762565" | "8843500" | "8903526" | "8965544" | "8971546" | "9246866").PN.	US-PGPUB; USPAT	OR	ON	2019/10/15 11:38

S2750	0	S2749 and "20050195999"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/15 11:51
S2751	2	"664634".ap. and register$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/15 13:29
S2752	2	("20080250065" "20100146502" "20090106261").pn. and (locat$6 gps position$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:34
S2753	6	("20080250065" "20100146502" "20090106261").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:35
S2754	3	("20080250065" "20090217343" "20090106261").pn. and (locat$6 gps position$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:36
S2755	498	sonos.as. and register$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:44
S2756	165	sonos.as. and register$9 and @ad<="20140924"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:44

S2757	6	sonos.as. and register$9 and @pd<="20130924"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:45
S2758	3	"20130073584"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:46
S2759	1,990	sonos and register$9 and @pd<="20130924"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:47
S2760	997	sonos and register$9 and @pd<="20130924" and audio	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:48
S2761	431	sonos and register$9 and @pd<="20130924" and audio same play$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:48
S2762	100	sonos and register$9 and @pd<="20130924" and audio same play$6 not sonos near3 silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:49
S2763	23	sonos and register$9 same play$6 and @pd<="20130924" and audio same play$6 not sonos near3 silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:50

S2764	33	sonos and regist$9 same play$6 and @pd<="20130924" and audio same play$6 not sonos near3 silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 11:53
S2765	23	sonos and register$9 same play$6 and @pd<="20130924" and audio same play$6 not sonos near3 silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:24
S2766	33	sonos and regist$9 same play$6 and @pd<="20130924" and audio same play$6 not sonos near3 silicon	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:24
S2767	10	S2766 not S2765	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:24
S2768	10	sonos.as. and regist$9 and @pd<="20130924"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:29
S2769	516	(social near4 media social$3media) and (regist$8) with play$5 near3 (media audio digital multimedia device)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:32
S2770	3	(social near4 media social$3media) and (regist$8) with play$5 near3 (media audio digital multimedia device) and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:32

S2771	3	(social near4 media social$3media) and (regist$8) with play$5 near3 (media audio digital multimedia device) and "381".clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/16 12:34
S2772	2	"9195258".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 16:52
S2773	5	"10209953".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 16:53
S2774	2	"10439896".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/07/23 16:54
S2775	18	("20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/07/23 17:00
S2784	77	("20010055950" | "20020146981" | "20020174243" | "20030002849" | "20030056220" | "20030103464" | "20030220705" | "20030225834" | "20040176025" | "20040195313" | "20040203376" | "20040214524" | "20050100166" | "20050129240" | "20050149204" | "20060265571" | "20060287746" | "20080273714" | "20090060219" | "20090087000" | "20090169030" | "20110222701" | "4661902" | "4689786" | "5852744" | "5910990" | "5960167" | "6026297" | "6131130" | "6336219" | "6732176" | "6772267" | "6788938" | "6950666" |	US-PGPUB; USPAT	OR	ON	2020/08/14 12:15

		"6965948" | "6970481" | "6981259" | "6993570" | "7076204" | "7107442" | "7123731" | "7158783" | "7174157" | "7184774" | "7246374" | "7275156" | "7308489" | "7363363" | "7376834" | "7392387" | "7400732" | "7454619" | "7532862" | "7561697" | "7581096" | "7634093" | "7657255" | "7716375" | "7752329" | "7757076" | "7792311" | "7899656" | "7904720" | "7907736" | "7916861" | "7937089" | "7937752" | "8156337" | "8250218" | "8509463" | "8515389" | "8768252" | "8797926" | "9014833" | "9078281" | "9560448" | "9998321").PN.				
S2785	75	S2784 and ($4group$4 $4set)	US-PGPUB; USPAT	OR	ON	2020/08/14 12:41
S2786	45	S2784 and ($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/14 12:44
S2787	1	"009182".ap. and adjust$4.clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 11:21
S2792	77	("20010055950" | "20020146981" | "20020174243" | "20030002849" | "20030056220" | "20030103464" | "20030220705" | "20030225834" | "20040176025" | "20040195313" | "20040203376" | "20040214524" | "20050100166" | "20050129240" | "20050149204" | "20060265571" | "20060287746" | "20080273714" | "20090060219" | "20090087000" | "20090169030" | "20110222701" | "4661902" | "4689786" | "5852744" | "5910990" | "5960167" | "6026297" | "6131130" | "6336219" | "6732176" | "6772267" | "6788938" | "6950666" | "6965948" | "6970481" | "6981259" | "6993570" | "7076204" | "7107442" | "7123731" | "7158783" | "7174157" | "7184774" | "7246374" | "7275156" | "7308489" | "7363363" | "7376834" | "7392387" | "7400732" | "7454619" | "7532862" | "7561697" | "7581096" | "7634093" | "7657255" | "7716375" | "7752329" | "7757076" | "7792311" | "7899656" | "7904720" | "7907736" | "7916861" | "7937089" | "7937752" | "8156337" | "8250218" | "8509463" |	US-PGPUB; USPAT	OR	ON	2020/08/17 12:10

		"8515389" | "8768252" | "8797926" | "9014833" | "9078281" | "9560448" | "9998321").PN.				
S2793	45	S2792 and ($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 12:10
S2794	45	S2793	US-PGPUB; USPAT; DERWENT	OR	ON	2020/08/17 12:10
S2795	107	"s2788" "s2789" "s2790" "s2791"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/08/17 12:11
S2828	0	(G06F3/162,0482,04842,04847,04855,165).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/17 13:12
S2829	0	(G06F16/27).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/08/17 13:12
S2836	18	("20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/08/18 14:45
S2837	0	"773996".ap. and consolid$7	US-PGPUB; USPAT	OR	ON	2020/08/20 12:32
S2838	3	("20060287746" | "7076204" | "7716375").PN.	US-PGPUB; USPAT	OR	ON	2020/08/20 12:43
S2839	73	("20010055950" | "20020146981" | "20020174243" | "20030002849" | "20030050058" | "20030056220" | "20030103464" | "20030220705" | "20030225834" | "20040176025" |	US-PGPUB; USPAT	OR	ON	2020/08/20 12:43

		"20040195313" | "20040203376" | "20040214524" | "20050100166" | "20050129240" | "20050149204" | "20060265571" | "20080273714" | "20090087000" | "20110222701" | "4661902" | "4689786" | "5852744" | "5910990" | "5960167" | "6026297" | "6131130" | "6336219" | "6349352" | "6732176" | "6772267" | "6788938" | "6950666" | "6965948" | "6970481" | "6981259" | "6993570" | "7107442" | "7123731" | "7158783" | "7174157" | "7184774" | "7246374" | "7275156" | "7308489" | "7363363" | "7376834" | "7392387" | "7400732" | "7454619" | "7532862" | "7561697" | "7581096" | "7634093" | "7657255" | "7752329" | "7757076" | "7899656" | "7904720" | "7907736" | "7916861" | "7937089" | "7937752" | "8156337" | "8250218" | "8509463" | "8515389" | "8768252" | "8797926" | "9014833" | "9078281" | "9560448" | "9998321").PN.				
S2840	18	("20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/08/20 12:46
S2841	94	S2838 S2839 S2840	US-PGPUB; USPAT; DERWENT	OR	ON	2020/08/20 12:48
S2842	14	S2841 and (surround "5.1")	US-PGPUB; USPAT; DERWENT	OR	ON	2020/08/20 12:57
S2843	20	S2841 and (surround "5.1" theater)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/08/20 12:57
S2844	8	("20170316803" "9955281" "20180217804").pn.	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2020/12/15 11:37

			DERWENT			

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S91	650	g06f17/30772.cpc.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:08
S92	151	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:09
S93	116,463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675	US-PGPUB; USPAT	OR	ON	2014/05/16 12:15

		OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S94	83,800	S93 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 12:25
S95	5,669	S93 and ($6zone scene configu$8) and discov$6	US-PGPUB; USPAT	OR	ON	2014/05/16 12:28
S96	2,883	S93 and ($6zone scene configu$8) and discov$6 and (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2014/05/16 12:29

S97	9,885	S93 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2014/05/16 12:29
S98	2,917	S93 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:29
S99	139,546	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30

		OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR				

		G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S100	98,841	S93 and "16"	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S101	7,856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S102	3,065	S101 and S99	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S103	222	S102 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S104	57	S102 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:31
S105	54,904	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 12:32

		H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S106	3,448	S101 and S105	US-PGPUB; USPAT	OR	ON	2014/05/16 12:32
S110	2	"20060165184"	US-PGPUB; USPAT	OR	ON	2014/05/16 13:22
S111	2	"20070094036"	US-PGPUB; USPAT	OR	ON	2014/05/16 13:24
S112	116,463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 13:26

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S113	2,883	S112 and ($6zone scene configu$8) and discov$6 and (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2014/05/16 13:26
S114	1	"Term Removed" and spatial near5 parameter	US-PGPUB; USPAT	OR	ON	2014/05/16 13:45
S115	1	"Term Removed" and second with temporary	US-PGPUB; USPAT	OR	ON	2014/05/16 13:52
S116	10	"Term Removed"	US-PGPUB; USPAT	OR	ON	2014/05/16 14:06
S117	8,030	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 14:31
S118	801	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 14:31
S119	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	2014/05/16 14:31
S120	637	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S112	US-PGPUB; USPAT	OR	ON	2014/05/16 14:32
S121	7,856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 14:32
S122	4,814	S112 and S121	US-PGPUB; USPAT	OR	ON	2014/05/16 14:32
S123	9	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S122	US-PGPUB; USPAT	OR	ON	2014/05/16 14:32
S124	41	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S122	US-PGPUB; USPAT	OR	ON	2014/05/16 14:33
S125	4,362	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2014/05/16 14:33
S126	15	S124 and S125	US-PGPUB; USPAT	OR	ON	2014/05/16 14:33

S127	457	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S125	US-PGPUB; USPAT	OR	ON	2014/05/16 14:33
S128	104,740	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2014/05/16 14:34
S129	3,019	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 14:34
S130	1,479	second near3 play$5 near4 (media song title) and S128	US-PGPUB; USPAT	OR	ON	2014/05/16 14:35
S131	218	S129 and S130	US-PGPUB; USPAT	OR	ON	2014/05/16 14:35
S132	104,740	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 20:51

		G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S133	3,019	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 20:51
S134	1,479	second near3 play$5 near4 (media song title) and S132	US-PGPUB; USPAT	OR	ON	2014/05/16 20:51
S135	218	S133 and S134	US-PGPUB; USPAT	OR	ON	2014/05/16 20:51
S136	116,463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S137	139,546	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR				

		H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S138	7,856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52
S139	3,065	S138 and S137	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52
S140	222	S139 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52
S141	116,463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S142	83,800	S141 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52
S143	0	"Term Removed" and the adj predetermined.clm.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:54

S144	2	"Term Removed" and predetermined.clm.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:55
S145	1	"Term Removed" and code.clm.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:56
S146	1	galand.in. and varying.ti.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:03
S147	5	"Term Removed" and compar$8	US-PGPUB; USPAT	OR	ON	2014/05/16 21:03
S148	0	liljyerd.in.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:05
S149	0	lilyjerd.in.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:05
S150	7	liljeryd.in. and enhancement.ti.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:06
S151	1	"Term Removed" and cod$4.clm.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:11
S152	173	galand.in. liljeryd.in. and (modulat$5 frequency with modulat$5)	US-PGPUB; USPAT	OR	ON	2014/05/16 21:18
S153	50	(galand.in. liljeryd.in.) and (modulat$5 frequency with modulat$5)	US-PGPUB; USPAT	OR	ON	2014/05/16 21:18
S154	8	(galand.in. liljeryd.in.) and (modulat$5 frequency with modulat$5) and (varying.ti. enhancement.ti.)	US-PGPUB; USPAT	OR	ON	2014/05/16 21:18
S155	1	"Term Removed" and high adj frequency.clm.	US-PGPUB; USPAT	OR	ON	2014/05/16 21:27
S156	8	(galand.in. liljeryd.in.) and (high adj frequency) and (varying.ti. enhancement.ti.)	US-PGPUB; USPAT	OR	ON	2014/05/16 21:27
S157	1	"Term Removed" and high adj frequency	US-PGPUB; USPAT	OR	ON	2014/05/16 21:29
S158	1	"Term Removed" and high adj frequency with complement$5	US-PGPUB; USPAT	OR	ON	2014/05/16 21:30

S159	6	qmf and high adj frequency with complement$5	US-PGPUB; USPAT	OR	ON	2014/05/16 21:31
S163	139,776	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18

		G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR				

		G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S164	7,856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S165	3,070	S164 and S163	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S166	222	S165 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S167	57	S165 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S168	801	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S169	2	"Term Removed" or "Term Removed"	US-PGPUB; USPAT	OR	ON	2014/05/19 09:19
S173	821	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:04
S174	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	2014/07/15 11:05
S175	106,524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR	US-PGPUB; USPAT	OR	ON	2014/07/15 11:05

		G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S176	1,530	second near3 play$5 near4 (media song title) and S175	US-PGPUB; USPAT	OR	ON	2014/07/15 11:05
S177	821	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:05
S178	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:10
S179	15	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:11
S180	1	"20120263318"	US-PGPUB; USPAT	OR	ON	2014/07/15 11:12
S181	3,139	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:13
S182	110	S181 and 700/94	US-PGPUB; USPAT	OR	ON	2014/07/15 11:14
S183	93	S181 and (700/94.ccls. 704/500-502.ccls.)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:19
S184	243	S181 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:20
S185	3	S184 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/07/15 11:20

S186	4	"8275307"	US-PGPUB; USPAT	OR	ON	2014/07/15 11:25
S187	1,452	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2014/07/15 11:25
S198	7	("20020098878" | "20020196134" | "20060046756" | "20070127734" | "4941187" | "6181334" | "6778073").PN.	US-PGPUB; USPAT	OR	ON	2014/07/15 13:05
S199	30	("2002/0098878").URPN.	USPAT	OR	ON	2014/07/15 13:08
S200	3	("8275307").URPN.	USPAT	OR	ON	2014/07/15 13:14
S201	3,139	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S202	243	S201 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S203	243	S202 and S202	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S204	1,452	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S205	1,452	S204	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S206	7	S203 and S204	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S236	721	g06f17/30772.cpc.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:34
S237	721	S236	US-PGPUB; USPAT	OR	ON	2014/11/26 13:34
S238	161	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:53
S239	161	S238	US-PGPUB; USPAT	OR	ON	2014/11/26 13:53
S240	107,060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 13:54

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S241	3,224	S240 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:54
S242	3,224	S241	US-PGPUB; USPAT	OR	ON	2014/11/26 13:54
S243	58,727	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 13:55

		H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S244	58,727	S243	US-PGPUB; USPAT	OR	ON	2014/11/26 13:55
S245	8,643	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S246	8,643	S245	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S247	107,060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56

		G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR				

		H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S248	8,352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S249	5,166	S247 and S248	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S250	15	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S249	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S251	15	S250	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S252	5,166	S249	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S253	154,604	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57

		H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR				

		H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S254	8,352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S255	3,355	S254 and S253	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S256	3,355	S255	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S257	107,060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 13:58

		G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S258	107,060	S257	US-PGPUB; USPAT	OR	ON	2014/11/26 13:58
S259	78,439	S257 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2014/11/26 13:59
S260	78,439	S259	US-PGPUB; USPAT	OR	ON	2014/11/26 13:59
S261	154,604	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09

		H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR				

		G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S262	8,352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09
S263	3,355	S262 and S261	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09
S264	3,355	S263	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09
S265	60	S263 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/11/26 14:11
S266	60	S265	US-PGPUB; USPAT	OR	ON	2014/11/26 14:11
S267	110,511	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16

		G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S268	1,604	second near3 play$5 near4 (media song title) and S267	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16
S269	1,604	S268	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16
S270	3,221	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2014/11/26 14:27
S271	253	S270 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2014/11/26 14:27
S272	253	S271	US-PGPUB; USPAT	OR	ON	2014/11/26 14:27
S273	253	S271	US-PGPUB; USPAT	OR	ON	2014/11/26 14:42
S274	4	S271 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/11/26 14:42
S275	4	S274	US-PGPUB; USPAT	OR	ON	2014/11/26 14:42
S276	5	700/94.ccls. and state near3 chang$3 with (audio signal output input) and $5speaker with network	US-PGPUB; USPAT	OR	ON	2014/11/26 14:44
S277	1,107,880	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	2014/11/26 14:49

S278	65	S277 and S271	US-PGPUB; USPAT	OR	ON	2014/11/26 15:02
S279	4,901	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2014/11/26 15:08
S280	9	(S270 S271) and S279	US-PGPUB; USPAT	OR	ON	2014/11/26 15:08
S281	0	("2014/0324202").URPN.	USPAT	OR	ON	2014/11/26 15:14
S282	0	("2013/0287228").URPN.	USPAT	OR	ON	2014/11/26 15:14
S283	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/11/26 15:32
S284	1,282	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and "48"	US-PGPUB; USPAT	OR	ON	2014/11/26 15:32
S285	1	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and S283	US-PGPUB; USPAT	OR	ON	2014/11/26 15:32
S286	1,189	(scene config$8 zone) same play$4 and S279	US-PGPUB; USPAT	OR	ON	2014/11/26 15:33
S287	461	(S267 S271) and S279	US-PGPUB; USPAT	OR	ON	2014/11/26 15:34
S288	252	(scene config$8 zone) same play$4 and S287	US-PGPUB; USPAT	OR	ON	2014/11/26 15:35
S293	3,221	S270	US-PGPUB; USPAT	OR	ON	2014/11/26 15:45
S294	107,133	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	2014/12/01 10:16

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S295	3,229	S294 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:16
S296	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2014/12/01 10:17
S297	1	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and S296	US-PGPUB; USPAT	OR	ON	2014/12/01 10:17
S298	8,355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:18
S299	5,167	S294 and S298	US-PGPUB; USPAT	OR	ON	2014/12/01 10:19
S300	1,827	(output pair$5 channel surround$4) with config$8 and S299	US-PGPUB; USPAT	OR	ON	2014/12/01 10:19
S301	86	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and S299	US-PGPUB; USPAT	OR	ON	2014/12/01 10:19
S302	0	("2013/0178963").URPN.	USPAT	OR	ON	2014/12/01 10:26
S303	77	cosine near2 transform same ahmed	USPAT	OR	ON	2014/12/01 10:28
S304	101	cosine near2 transform same ahmed	US-PGPUB; USPAT	OR	ON	2014/12/01 10:28

S305	60	cosine near2 transform same ahmed same natarajan	US-PGPUB; USPAT	OR	ON	2014/12/01 10:28
S306	1	video adj codec with jain	US-PGPUB; USPAT	OR	ON	2014/12/01 10:28
S307	1	video with codec with jain	US-PGPUB; USPAT	OR	ON	2014/12/01 10:29
S308	448	video with codec with motion with compensation	US-PGPUB; USPAT	OR	ON	2014/12/01 10:29
S309	0	video with codec with motion with compensation same jain	US-PGPUB; USPAT	OR	ON	2014/12/01 10:30
S310	6	video with codec with motion with compensation and jain	US-PGPUB; USPAT	OR	ON	2014/12/01 10:30
S311	1	("2008/0243278").URPN.	USPAT	OR	ON	2014/12/01 10:40
S312	8,355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:40
S313	58,784	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033	US-PGPUB; USPAT	OR	ON	2014/12/01 10:40

		OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S314	3,740	S312 and S313	US-PGPUB; USPAT	OR	ON	2014/12/01 10:40
S315	5	("2006/0149402").URPN.	USPAT	OR	ON	2014/12/01 10:42
S316	8	("2006/0009985").URPN.	USPAT	OR	ON	2014/12/01 10:45
S317	8	"Term Removed"	USPAT	OR	ON	2014/12/01 10:48
S318	12	"Term Removed"	US-PGPUB; USPAT	OR	ON	2014/12/01 10:48
S319	50	("20020002039" | "20020003548" | "20020072816" | "20020124097" | "20030020763" | "20030167335" | "20030177889" | "20040010727" | "20040015252" | "20040117044" | "20040131192" | "20040223622" | "20040225389" | "20050002535" | "20050021470" | "20050131558" | "20050144284" | "20050289224" | "20060041616" | "20060149402" | "20070142022" | "20070142944" | "20070189544" | "20070288610" | "20080025535" | "20080045140" | "20080077261" | "20080144861" | "20080152165" | "5182552" | "5946343" | "6631410" | "6778869" | "7130608" | "7187947" | "7218708" | "7539551" | "7558224" | "7571014" | "7643894" | "7668990" | "7742832" | "7761176" | "7805210" | "7962482" | "8045952" | "8189824" | "8234395" | "8239559" | "8290603").PN. OR ("8788080").URPN.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:51

S320	7	("2008/0045140").URPN.	USPAT	OR	ON	2014/12/01 10:57
S321	25	("20030024375" | "20030121401" | "20030150317" | "20040154460" | "20050120865" | "20060179160" | "20070065794" | "20070293250" | "20080045140" | "20080139229" | "20080216125" | "20090168088" | "20090213032" | "20090272251" | "20100033402" | "20100041330" | "7012185" | "7091926" | "7164906" | "7297858" | "7453418" | "7483080" | "7489323" | "8044289" | "RE42565").PN.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:58
S322	41	("2004/0223622").URPN.	USPAT	OR	ON	2014/12/01 11:05
S323	27	("2002/0124097").URPN.	USPAT	OR	ON	2014/12/01 11:10
S324	154,812	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR	US-PGPUB; USPAT	OR	ON	2014/12/01 11:12

		H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR				

		H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S325	8,355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 11:12
S326	3,356	S325 and S324	US-PGPUB; USPAT	OR	ON	2014/12/01 11:12
S327	240	S326 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/12/01 11:12
S328	7	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2014/12/01 11:17
S377	10	"Term Removed" or "Term Removed"	US-PGPUB; USPAT	OR	ON	2015/02/06 17:41
S378	17	"Term Removed"	US-PGPUB; USPAT	OR	ON	2015/02/06 17:41
S379	19	"Term Removed" or "Term Removed"	US-PGPUB; USPAT	OR	ON	2015/02/06 17:41
S380	36	S378 S379	US-PGPUB; USPAT	OR	ON	2015/02/06 17:42

S381	23	S380 and request$6	US-PGPUB; USPAT	OR	ON	2015/02/06 17:42
S401	0	reverberation and mccord	US-PGPUB; USPAT	OR	ON	2015/02/07 10:13
S402	11	"Term Removed"	US-PGPUB; USPAT	OR	ON	2015/02/07 10:17
S503	13	("20020098878" | "20050100174" | "20050177256" | "20060179160" | "20060205349" | "20060229752" | "20070223725" | "20080092204" | "20100010651" | "20100052843" | "5406634" | "5519641" | "6889207").PN.	US-PGPUB; USPAT	OR	ON	2015/02/24 16:04
S511	3,548	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2015/05/07 10:49
S512	3,548	S511	US-PGPUB; USPAT	OR	ON	2015/05/07 10:49
S513	115,368	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:12

S514	1,681	second near3 play$5 near4 (media song title) and S513	US-PGPUB; USPAT	OR	ON	2015/05/07 11:12
S515	1,681	S514	US-PGPUB; USPAT	OR	ON	2015/05/07 11:12
S516	115,368	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:13
S517	1,681	second near3 play$5 near4 (media song title) and S516	US-PGPUB; USPAT	OR	ON	2015/05/07 11:13
S518	1,681	S517	US-PGPUB; USPAT	OR	ON	2015/05/07 11:13
S519	109,073	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16

		G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR				

		H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S520	8,708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S521	5,414	S519 and S520	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S522	58	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S521	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S523	5,119	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S524	18	S522 and S523	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S525	18	S524	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S526	3,358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S527	268	S526 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S528	5	S527 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S529	5	S528	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37

S530	3,358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S531	268	S530 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S532	268	S531 and S531	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S533	1,666	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S534	7	S532 and S533	US-PGPUB; USPAT	OR	ON	2015/05/07 11:37
S535	918	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2015/05/07 11:56
S536	918	S535	US-PGPUB; USPAT	OR	ON	2015/05/07 11:56
S537	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	2015/05/07 11:58
S538	3	S537	US-PGPUB; USPAT	OR	ON	2015/05/07 11:58
S539	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	2015/05/07 12:28
S540	3	S539	US-PGPUB; USPAT	OR	ON	2015/05/07 12:28
S542	3,358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S543	268	S542 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S544	18,034	S542 (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S545	109,073	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30

		G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR				

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S546	8,708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S547	5,414	S545 and S546	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S548	58	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S547	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S549	1,621	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:31
S550	3,694	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:31
S551	15,779	(zone scene config$9) with play$4 and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32
S552	1,117	S550 and S551	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32
S553	1,354	(network$6) near3 (playback adj device $6speaker transducer) and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32

S554	959	(network$6) near3 ($6speaker transducer) and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32
S555	156	S551 and S554	US-PGPUB; USPAT	OR	ON	2015/05/07 12:38
S556	150	S551 and S554 not sonos.as.	US-PGPUB; USPAT	OR	ON	2015/05/07 12:55
S557	5,414	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2015/05/07 12:56

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.) and S546				
S558	53	S554 and S557	US-PGPUB; USPAT	OR	ON	2015/05/07 12:56
S559	3,358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2015/05/07 13:53
S560	10	("20080159545" | "20090232326" | "20100153097" | "6487296" | "7689305" | "7804972" | "8054987" | "8233635" | "8498726" | "8588432").PN.	US-PGPUB; USPAT	OR	ON	2015/05/07 13:59
S561	5	("20020143547" | "20040147224" | "20040220687" | "7346332" | "7561932").PN.	US-PGPUB; USPAT	OR	ON	2015/05/07 14:00

S563	5,371	h04r2227/$3.cpc. h04r2420/$4.cpc. h04s7/30.cpc. h04r2227/$3.cpc. h04r27/$3.cpc. h04r3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/05/08 16:31
S564	304	S563 and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/05/08 16:31
S565	273	S563 and 700/94.ccls. and (config$8 pair$6 mp4 mpeg4 mpeg$3"4")	US-PGPUB; USPAT	OR	ON	2015/05/08 16:31
S566	273	S563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo)	US-PGPUB; USPAT	OR	ON	2015/05/08 16:32
S567	156	S563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo) same $5speaker	US-PGPUB; USPAT	OR	ON	2015/05/08 16:32
S568	100	S563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo) same $5speaker and network$6	US-PGPUB; USPAT	OR	ON	2015/05/08 16:32
S569	47	S563 and 700/94.ccls. and (config$8 pair$6) and (multi$6channel surround "5.1" multi$6 near2 channel joint near3 stereo) same $5speaker and network$6	US-PGPUB; USPAT	OR	ON	2015/05/08 16:33
S570	29	S563 and 700/94.ccls. and (config$8 pair$6) and (multi$6channel surround "5.1" multi$6 near2 channel joint near3 stereo) same $5speaker and $5speaker same network$6	US-PGPUB; USPAT	OR	ON	2015/05/08 16:33
S584	8	("20010046235" | "20020173273" | "20040098754" | "20050062637" | "20130022221" | "5153579" | "7206967" | "7711774").PN.	US-PGPUB; USPAT	OR	ON	2015/05/12 12:26
S585	8	("20010046235" | "20020173273" | "20040098754" | "20050062637" | "20130022221" | "5153579" | "7206967" | "7711774").PN.	US-PGPUB; USPAT	OR	ON	2015/05/12 12:28
S586	16	("20010042107" | "20020022453" | "20020026442" | "20030073432" | "20030157951" | "20040019497" | "20040024478" | "5602992" | "5923902" | "6404811" | "6522886" | "7130616" | "7136934" | "7143939" | "7236773" | "7657910").PN.	US-PGPUB; USPAT	OR	ON	2015/05/12 12:28
S587	0	makino.in. and mccord.xa.	US-PGPUB; USPAT	OR	ON	2015/05/12 15:20

S588	2	heavy and mccord.xa.	US-PGPUB; USPAT	OR	ON	2015/05/12 15:20
S589	4	makino.in. and mccord.xp.	US-PGPUB; USPAT	OR	ON	2015/05/12 15:20
S590	1	kenwood.as. and mccord.xp.	US-PGPUB; USPAT	OR	ON	2015/05/12 15:21
S591	114,425	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2015/10/13 10:46

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S592	12,432	S591 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2015/10/13 10:46
S593	3,745	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2015/10/13 10:57
S594	181,474	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58

		OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S595	8,932	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58

S596	186,607	S594 S595	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58
S597	1,162	(audes$8 zone with play$4) and play$5 with different near3 (song media content config$6 set$6 align$6) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S598	1,772	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S599	1,662,198	(activ$7 audio signal) with detect$6	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S600	803	S597 and S599	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S601	165	S597 and S599 and S596	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S602	976	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2015/10/13 11:18
S603	159	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S596	US-PGPUB; USPAT	OR	ON	2015/10/13 11:18
S604	8	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2015/10/13 11:18
S605	4	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2015/10/13 11:19
S606	68	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2015/10/13 11:19
S607	1	automat$6 near6 channel near3 (config$8 set$4 map$6) same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2015/10/13 11:19
S608	13	"Term Removed"	US-PGPUB; USPAT	OR	ON	2015/10/13 11:21
S609	1	"20140286507"	US-PGPUB; USPAT	OR	ON	2015/10/13 11:23

S610	114,425	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2015/10/13 11:27

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S611	3,995	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S610	US-PGPUB; USPAT	OR	ON	2015/10/13 11:27
S612	4,352	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with audio) and S610	US-PGPUB; USPAT	OR	ON	2015/10/13 11:28
S613	3,776	S594 and S595	US-PGPUB; USPAT	OR	ON	2015/10/13 11:41
S614	163	S594 and S595 and S612	US-PGPUB; USPAT	OR	ON	2015/10/13 11:41
S615	5,373	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2015/10/13 12:00
S616	624	(set$3top set adj top) same $6channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT	OR	ON	2015/10/13 12:00
S617	58	S613 and S615	US-PGPUB; USPAT	OR	ON	2015/10/13 12:01

S618	0	S613 and S616	US-PGPUB; USPAT	OR	ON	2015/10/13 12:01
S619	7	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2015/10/13 12:13
S620	5	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6 and S619	US-PGPUB; USPAT	OR	ON	2015/10/13 12:13
S621	14	"5321636"	US-PGPUB; USPAT	OR	ON	2015/10/13 15:05
S622	1	"20020120925"	US-PGPUB; USPAT	OR	ON	2015/10/14 08:43
S623	1	"20020120925" and search$6	US-PGPUB; USPAT	OR	ON	2015/10/14 08:43
S624	1	"20020120925" and caption$6 same (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2015/10/14 08:45
S625	1	"20020120925" and caption$6 same (sync synchron$9) and (detect$6 search$6 found find$6)	US-PGPUB; USPAT	OR	ON	2015/10/14 08:54
S626	1	"20020120925" and caption$6 same (sync synchron$9) and (detect$6 search$6 found find$6) and record$4	US-PGPUB; USPAT	OR	ON	2015/10/14 08:58
S627	2	"20090173731"	US-PGPUB; USPAT	OR	ON	2015/10/14 12:41
S628	10	"Term Removed"	US-PGPUB; USPAT	OR	ON	2015/10/14 17:58
S629	1	"Term Removed" and 5d	US-PGPUB; USPAT	OR	ON	2015/10/14 17:58
S630	3	disch.in. near3 sascha and 5d	US-PGPUB; USPAT	OR	ON	2015/10/14 17:59
S634	117,173	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	2016/01/11 14:33

		G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR				

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S635	3,683	S634 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/01/11 14:33
S636	11	"Term Removed"	US-PGPUB; USPAT	OR	ON	2016/01/11 14:33
S637	1	"20140361867"	US-PGPUB; USPAT	OR	ON	2016/01/11 14:34
S638	42,365	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S639	35,933	S638 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S640	20,704	S638 and ($6zone scene configu$8).clm.	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S641	1,512	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36

		(700/94 715/716 715/727 340/4.41).CCLS.)				
S642	837	S641 and ($6zone scene configu$8).clm.	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S643	106	S641 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/01/11 14:37
S644	247	S641 and ($6zone scene configu$8) and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:37
S645	176	S641 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:41
S646	1,043	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:41
S647	1,945	S638 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:41
S648	25	S646 and S647	US-PGPUB; USPAT	OR	ON	2016/01/11 14:41
S649	505	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S638	US-PGPUB; USPAT	OR	ON	2016/01/11 14:45
S650	100	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S641	US-PGPUB; USPAT	OR	ON	2016/01/11 14:45
S652	9	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2016/01/11 14:49
S653	2,363	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S638	US-PGPUB; USPAT	OR	ON	2016/01/11 14:49
S654	233	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S641	US-PGPUB; USPAT	OR	ON	2016/01/11 14:50
S655	183,438	(scene config$6 zone network$4) with play$4	US-PGPUB; USPAT	OR	ON	2016/01/11 14:50

S656	7,355	(scene config$6 zone network$4) with play$4 with ($5speak$3 transducer)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:51
S657	155	(scene config$6 zone network$4) with play$4 with ($5speak$3 transducer).clm. and S638	US-PGPUB; USPAT	OR	ON	2016/01/11 14:51
S658	12	sonos.as. and mccord	US-PGPUB; USPAT	OR	ON	2016/01/11 14:52
S673	118,242	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2016/02/02 13:51

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S674	3,856	S673 and ($6zone scene configu$8 set$4up) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:51
S675	3,769	S673 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:51
S676	804	S673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:53
S677	2,617	S673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:54

S678	947	S673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:54
S679	3,186	S673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:54
S680	31,661	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:54
S681	10,647	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 13:54
S682	779	S673 and ($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 14:08
S683	10,192	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 14:08
S684	10,083	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/02/02 14:08
S685	564	S681 not S684	US-PGPUB; USPAT	OR	ON	2016/02/02 14:09
S686	453	S681 not S684 and display$4	US-PGPUB; USPAT	OR	ON	2016/02/02 14:09
S687	354	S681 not S684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:09
S688	156	S681 not S684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:11
S689	158	S681 not S684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:11
S690	111	S681 not S684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:12

S691	31,661	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2016/02/02 14:12
S692	1,044	(S691 S681) not S684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:12
S693	29,687	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2016/02/02 14:12
S694	356	(S691 S681) not (S693 S684) and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:13
S695	226	(S691 S681) not (S693 S684) and display$4 with ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) with (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2016/02/02 14:13
S696	0	("2015/0373395").URPN.	USPAT	OR	ON	2016/02/02 14:27
S697	0	("2015/0095323").URPN.	USPAT	OR	ON	2016/02/02 14:27
S698	125,401	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2016/02/02 14:27

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)				
S699	156	S694 and S698	US-PGPUB; USPAT	OR	ON	2016/02/02 14:28
S700	2,111	second near3 play$5 near4 (media song title) and S698	US-PGPUB; USPAT	OR	ON	2016/02/02 14:38
S701	695	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and S698	US-PGPUB; USPAT	OR	ON	2016/02/02 14:39
S702	49	S694 and S701	US-PGPUB; USPAT	OR	ON	2016/02/02 14:39
S703	1,305	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and S698	US-PGPUB; USPAT	OR	ON	2016/02/02 14:39
S704	695	S703 and S701	US-PGPUB; USPAT	OR	ON	2016/02/02 14:40
S705	2	("20090062943" "20110276333").pn.	US-PGPUB; USPAT	OR	ON	2016/02/03 10:50
S717	90	("20020002039" | "20020072816" | "20020124097" | "20040117044" | "20050131558" | "20050254505" | "20070288610" | "20080066094" | "20080077261" | "20080144861" | "6587127" | "6604023" | "7742832" | "8234395" | "20020026442" | "6757517" | "7130616" | "8103009" | "20050021470" | "20060041616" | "20080025535" | "20080045140" | "6778869" | "7130608" | "7626952" | "8189824" | "6404811" | "20130103873" | "7558224" | "7761176" | "7962482" | "8700730" | "20030157951" | "7657910" | "20030167335" | "20060149402" | "20080066120" | "20090228919" | "6631410" | "7187947" | "7817960" | "5923902" | "7483538" | "8423893" | "20030020763" | "20030177889" | "20040223622" | "20050002535" | "20050289224" | "20070142022" | "5946343" | "7668990" | "20040024478" | "6256554" | "7143939" | "7236773" | "20020003548" | "20030198257" |	US-PGPUB; USPAT	OR	ON	2016/02/04 13:19

		"20040010727" | "20050289244" | "5182552" | "7218708" | "7805210" | "7849181" | "8045952" | "6522886" | "8014423" | "20140093085" | "20040225389" | "20070142944" | "20080152165" | "20080162668" | "20010042107" | "7853341" | "8762565" | "8965544" | "20040015252" | "20040131192" | "20050144284" | "20070189544" | "20090097672" | "7302468" | "7539551" | "7571014" | "7643894" | "8239559" | "8290603" | "8788080" | "20020022453" | "6611537").PN.				
S718	125,524	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675	US-PGPUB; USPAT	OR	ON	2016/02/04 13:19

		OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)				
S719	1,305	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and S718	US-PGPUB; USPAT	OR	ON	2016/02/04 13:19
S720	0	"2014074089"	US-PGPUB; USPAT	OR	ON	2016/02/04 13:25

S776	15	"Term Removed" or "Term Removed"	US-PGPUB; USPAT	OR	ON	2016/03/08 12:35
S788	2	"Term Removed"	US-PGPUB	OR	ON	2016/03/10 10:41
S789	2	"Term Removed"	US-PGPUB	OR	ON	2016/03/10 10:41
S790	95	("5668884" | "6611537" | "7571014" | "7657910" | "20120051558" | "20140016784" | "20140016802" | "20150201274" | "7490044" | "8063698" | "8160281" | "8306235" | "8831761" | "8977974" | "6522886" | "7792311" | "8843224" | "20140016786" | "20140226823" | "20140294200" | "7519188" | "8331585" | "8879761" | "8914559" | "5923902" | "6404811" | "6778869" | "7643894" | "8234395" | "7689305" | "20130259254" | "7251533" | "7383036" | "7607091" | "5218710" | "7483538" | "20110170710" | "20130010970" | "20140219456" | "7072477" | "8175292" | "8243961" | "8984442" | "5553147" | "6704421" | "6757517" | "8014423" | "20140355768" | "5910991" | "7630500" | "5673323" | "7171010" | "8045952" | "8103009" | "20140023196" | "20140112481" | "20140355794" | "20150146886" | "4995778" | "7394480" | "8229125" | "8452020" | "8620006" | "8934655" | "6256554" | "6631410" | "6916980" | "7130608" | "7130616" | "20070142944" | "7853341" | "20120263325" | "20130028443" | "20140233755" | "8233632" | "8238578" | "8265310" | "8290185" | "8325935" | "8391501" | "8577045" | "5946343" | "6931134" | "7143939" | "7236773" | "20100142735" | "20120127831" | "20150063610" | "20150281866" | "8139774" | "8600075" | "8855319" | "8934647" | "8965546" | "9020153").PN.	US-PGPUB; USPAT	OR	ON	2016/03/10 10:41
S791	0	S789 and S790	US-PGPUB; USPAT	OR	ON	2016/03/10 10:42
S793	10	"Term Removed" or "Term Removed"	US-PGPUB; USPAT	OR	ON	2016/03/10 13:49

S820	121,310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2016/05/27 13:27

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S821	3,989	S820 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 13:27
S822	4	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2016/05/27 13:27
S823	121,310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28

		G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR				

		H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S824	852	S823 and ($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S825	10,655	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S826	10,543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S827	10,655	S824 S825 S826	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S828	4,189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S829	1,150	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S830	34,399	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S831	5,915	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S832	1,111	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S833	1,071	S832 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S834	61,513	((G06F3/165 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR H03G3/20 OR H03G1/02 OR H03G7/00 OR H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04R2420/01 OR H04R2430/01 OR H04S7/30 OR H04H60/80 OR H04N21/43615).CPC. OR (381/17 OR 709/221 OR 709/230 OR 709/231 OR 715/716 OR 715/727 OR 715/734 OR 715/735).CCLS.)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:30

S835	806	S827 AND S834	US-PGPUB; USPAT	OR	ON	2016/05/27 13:30
S836	14	S835 AND (S828 S829)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:30
S837	121,310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01

		G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S838	852	S837 and ($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S839	10,655	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S840	10,543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S841	10,655	S838 S839 S840	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S842	10,655	S841	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01

S843	4,189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 15:02
S844	4,189	S843	US-PGPUB; USPAT	OR	ON	2016/05/27 15:02
S904	208,455	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13

		OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR				

		G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S905	9,205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13
S906	3,967	S905 and S904	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13
S907	69	S906 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13
S908	131,142	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527	US-PGPUB; USPAT	OR	ON	2016/08/10 11:53

		OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)				
S909	804	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and S908	US-PGPUB; USPAT	OR	ON	2016/08/10 11:53

S910	4,514	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title)	US-PGPUB; USPAT	OR	ON	2016/08/10 11:53
S911	2,527	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and (stereo multi$6channel multi$4 adj channel pair$4)	US-PGPUB; USPAT	OR	ON	2016/08/10 11:54
S912	5,835	second near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4)	US-PGPUB; USPAT	OR	ON	2016/08/10 11:54
S913	15,686	(plural$6 second multi$4) near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4 "5.1" surround$4)	US-PGPUB; USPAT	OR	ON	2016/08/10 12:26
S914	123,888	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41

		G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S915	9,205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41
S916	5,859	S914 and S915	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41

S917	48	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S916	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41
S918	4,308	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41
S919	243	S913 and S918	US-PGPUB; USPAT	OR	ON	2016/08/10 12:54
S920	288	channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2016/08/10 13:26
S921	15,686	(plural$6 second multi$4) near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4 "5.1" surround$4)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:26
S922	4,308	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:26
S923	243	S921 and S922	US-PGPUB; USPAT	OR	ON	2016/08/10 13:26
S924	1,737	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:44
S925	205	S924 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:44
S926	19,130	($6zone scene configu$8).ab. and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:45
S927	25,946	($6zone scene configu$8 stereo pair$4).ab. and ($6zone scene configu$8 stereo pair$4).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	2016/08/10 13:45

S928	3,394	($6zone scene configu$8 stereo pair$4).ab. and ($6zone scene configu$8 stereo pair$4).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.) and S921	US-PGPUB; USPAT	OR	ON	2016/08/10 13:46
S929	1,577	($6zone scene configu$8 (multi$channel multi$4 adj channel stereo) near3 (config$6 pair$4)).ab. and ($6zone scene configu$8 (multi$channel multi$4 adj channel stereo) near3 (config$6 pair$4)).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.) and S921	US-PGPUB; USPAT	OR	ON	2016/08/10 13:47
S930	2	"20110043617"	US-PGPUB; USPAT	OR	ON	2016/08/10 14:06
S931	4	"20150185964" "20060002572"	US-PGPUB; USPAT	OR	ON	2016/08/10 14:07
S932	11	"Term Removed" and between	US-PGPUB; USPAT	OR	ON	2016/08/10 14:14
S933	1	("2015/0185964").URPN.	USPAT	OR	ON	2016/08/10 14:31
S934	24	("20030035550" | "20030041332" | "20050166258" | "20070106941" | "20070143820" | "20070189544" | "20090135022" | "20090175599" | "20090265172" | "20110029326" | "20110157046" | "20120060116" | "20130117248" | "20140108010" | "20140226953" | "20140255003" | "20150163558" | "20150185964" | "5371551" | "6496205" | "6529586" | "7293279" | "8244105" | "9055271").PN. OR ("9274673").URPN.	US-PGPUB; USPAT	OR	ON	2016/08/10 14:32
S935	314	sonos.as.	US-PGPUB; USPAT	OR	ON	2016/08/10 14:49
S936	12	sonos.as. and (S920 S925 S929)	US-PGPUB; USPAT	OR	ON	2016/08/10 14:50
S937	166	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and sonos.as.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:05

S938	1,195	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2016/08/10 15:05
S939	14,180	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2016/08/10 15:05
S940	176	S938 and S939	US-PGPUB; USPAT	OR	ON	2016/08/10 15:05
S941	6,090	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/08/10 15:19
S942	81	second near3 play$5 near4 (media song title) and sonos.as.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:19
S943	466,330	(G06F3/165 OR G06F3/0482 OR G06F3/16 OR G06F3/0484 OR G06F17/30058 OR G06F3/04847 OR G06F17/3074 OR G06F3/04842 OR G06F17/00 OR G06F17/30749 OR G06F1/00 OR G06F1/12 OR G06F3/048 OR G06F3/04817 OR G06F3/167 OR G06F17/30772 OR G06F3/0486 OR G06F17/30053 OR G06F3/162 OR G06F9/5038 OR G06F17/30864 OR G06F1/26 OR G06F1/3203 OR G06F1/3206 OR G06F3/0488 OR G06F3/04883 OR G06F17/30035 OR G06F17/30038 OR G06F17/30504 OR G06F17/3053 OR G06F17/30743 OR G06F17/30761 OR G06F17/30867 OR G06F17/30876 OR G06F21/10 OR G06F21/6218 OR G06F3/017 OR G06F3/0481 OR G06F3/04886 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR H04R3/12 OR H04R2420/07 OR H04R3/04 OR H04R5/04 OR H04R11/00 OR H04R2430/03 OR H04R3/14 OR H04R29/00 OR H04R29/007 OR H04R2420/03 OR H04R2430/01 OR H04R2499/11 OR H04R29/001 OR H04R29/008 OR H04R3/00 OR H04N21/43615 OR H04N21/8113 OR H04N21/4307 OR H04N5/04 OR H04N9/7904 OR H04N21/26258 OR H04N21/41407 OR H04N21/4825 OR H04N21/4396 OR H04N21/458 OR H04N21/47217 OR H04N21/8106 OR H04N1/00 OR H04N21/25816 OR H04N21/4126 OR H04N21/42684 OR	US-PGPUB; USPAT	OR	ON	2016/08/10 15:20

		H04N21/44227 OR H04N21/6125 OR H04N21/6175 OR H04N21/6402 OR H04N21/6405 OR H04N21/6408 OR H04N21/00 OR H04N21/42218 OR H04N21/4222 OR H04N21/4227 OR H04N21/4302 OR H04N21/4316 OR H04N21/436 OR H04N21/43637 OR H04N21/439 OR H04N21/44222 OR H04N21/4425 OR H04N21/4524 OR H04N21/4725 OR H04N21/482 OR H04N21/4826 OR H04N21/6131 OR H04N21/6181 OR H04N21/6587 OR H04L65/4084 OR H04L65/60 OR H04L67/10 OR H04L65/80 OR H04L67/1095 OR H04L67/12 OR H04L12/2854 OR H04L65/4076 OR H04L65/4092 OR H04L65/601 OR H04L67/26 OR H04L69/28 OR H04L2012/2849 OR H04L12/2812 OR H04L12/282 OR H04L12/2838 OR H04L63/08 OR H04L65/602 OR H04L12/12 OR H04L12/18 OR H04L12/2602 OR H04L12/28 OR H04L12/462 OR H04L1/0001 OR H04L2012/2841 OR H04L29/06027 OR H04L45/16 OR H04L45/22 OR H04L45/745 OR H04L61/6022 OR H04L63/105 OR H04L65/1003 OR H04L65/4023 OR H04L65/608 OR H04L12/2803 OR H04L12/2809 OR H04L12/2814 OR H04L12/2829 OR H04L12/2834 OR H04L12/4625 OR H04L12/6418 OR H04L63/083 OR H04L63/101 OR H04L63/108 OR H04L65/00 OR H04L65/1026 OR H04L65/1069 OR H04L65/4007 OR H04L65/403 OR H04L65/4069 OR H04L65/604 OR H04L67/02 OR H04L67/125 OR H04L67/142 OR H04L67/306 OR H04L67/325 OR H04L7/00 OR H03G3/20 OR H03G3/00 OR H03G3/001 OR H03G3/02 OR H03G3/04 OR H03G3/348 OR H03G5/165 OR H03G7/002 OR H03G3/3089 OR H03G3/32 OR H03G5/005 OR G08C17/02 OR G08C23/04 OR G08C2201/40 OR G11B2020/10592 OR G11B20/10527 OR G11B27/105 OR G11B19/025 OR G11B2020/10972 OR G11B27/002 OR G11B20/10 OR G11B27/10 OR G11B19/027 OR G11B23/049 OR G11B27/00 OR G11B27/102 OR				

		G11B27/34 OR H04H20/103 OR H04H20/26 OR H04H2201/20 OR H04H60/80 OR H04J3/0664 OR H04W56/0015 OR H04W84/20 OR H04W4/043 OR H04W40/02 OR H04W40/12 OR H04W4/003 OR H04W52/0212 OR H04W52/0219 OR H04W52/0251 OR H04W52/46 OR H04W84/18 OR H04W4/00 OR H04W4/008 OR H04W4/02 OR H04W4/021 OR H04W76/02 OR H04W76/028 OR H04W76/064 OR H04W84/12 OR H04B17/318 OR H04B17/00 OR H04S2400/03 OR H04S7/301 OR H04S3/008 OR H04S7/00 OR H04S7/302 OR H04S7/305 OR Y02B60/32 OR Y02B60/34 OR Y02B60/35 OR Y02B60/50 OR G01S3/80 OR G06Q20/20 OR G06Q20/209 OR G06Q20/322 OR G06Q50/01 OR G07G1/0009).CPC.				
S944	19,755	(700/94 OR 715/716 OR 381/109 OR 381/56 OR 381/58 OR 381/80 OR 705/16 OR 725/25 OR 726/28).CCLS.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:20
S945	11,442	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S946	10,821	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S947	34,398	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S948	32,223	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S949	434	(S947 S945) not (S948 S946) and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S950	357	(S943 S944) and S949	US-PGPUB; USPAT	OR	ON	2016/08/10 15:35
S951	33	(S943 S944) and S949 and ((stereo surround$4 "5.1" sub$3woof$4	US-PGPUB; USPAT	OR	ON	2016/08/10 15:43

		pair$4).clm. (stereo surround$4 "5.1" sub$3woof$4 pair$4).ab.)				
S1011	21	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2017/01/03 10:42
S1012	52	("7324857" "7263110" "20020124097" "20050131558" "20030014486" "20040223622" "7295548" "6684060" "20040014426" "20070087686" "7987294" "6487296" "20040037433" "5361381" "7853341" "7653344" "7324857" "7263110" "20020124097" "20050131558" "20040223622" "7295548" "6684060" "7630501" "8600084" "8942395" "7987294" "7688306" "8150079" "8565455" "8374595" "6901439" "20030212802" "7305694" "20040168081" "7356011" "727754720030014486" "20040223622" "7295548" "6684060" "20070087686" "20040014426" "6487296" "20040037433" "5361381" "7853341" "8653344" "7987294" "4824059" "7095528" "5818948" "5151922" "6919771" "20010043456" "4731814" "5774016" "8654995" "20040185773" "7308188" "6535121" "5440644" "7324857" "7987294" "20020124097" "20050131558" "20030014484" "7627825" "6469633" "5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7197148" "5182552" "6469633" "20020072816" "6931557").pn.	US-PGPUB; USPAT	OR	ON	2017/01/03 10:42
S1013	0	S1011 and S1012	US-PGPUB; USPAT	OR	ON	2017/01/03 10:42
S1014	3,841	agere.as.	US-PGPUB; USPAT	OR	ON	2017/01/03 11:03
S1015	463	agere.as. and audio	US-PGPUB; USPAT	OR	ON	2017/01/03 11:03
S1016	1	"20070087686"	US-PGPUB; USPAT	OR	ON	2017/01/03 11:12

S1017	13	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/01/03 12:10
S1018	583	intensity and (path ray) near3 trac$4 and hash$4	US-PGPUB; USPAT	OR	ON	2017/01/03 12:11
S1019	283	intensity and (path ray) near3 trac$4 and hash$4 and delay$6	US-PGPUB; USPAT	OR	ON	2017/01/03 12:11
S1020	255	intensity and (path ray) near3 trac$4 and hash$4 and delay$6 and graph$4	US-PGPUB; USPAT	OR	ON	2017/01/03 12:11
S1021	23	intensity and (path ray) near3 trac$4 and hash$4 and delay$6 and graph$4 and mesh$4	US-PGPUB; USPAT	OR	ON	2017/01/03 12:12
S1022	0	("2013/0002672").URPN.	USPAT	OR	ON	2017/01/03 12:14
S1023	10,984	voxel$6	USPAT	OR	ON	2017/01/03 12:14
S1024	2,723	voxel$6.clm.	USPAT	OR	ON	2017/01/03 12:15
S1025	360	voxel$6.clm. with surfac$4	USPAT	OR	ON	2017/01/03 12:15
S1029	226,745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1030	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1031	4,049	S1030 and S1029	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1032	276	S1031 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1033	71	S1031 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1034	276	S1032 S1033	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1035	4,049	S1031	US-PGPUB; USPAT	OR	ON	2017/02/17 11:08

S1036	565	S1031 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:08
S1037	603	S1032 S1036	US-PGPUB; USPAT	OR	ON	2017/02/17 11:08
S1038	11,621	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:31
S1039	1,325	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:31
S1040	12,924	S1038 S1039	US-PGPUB; USPAT	OR	ON	2017/02/17 11:31
S1041	75,707	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1042	4,349	S1030 and S1041	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1043	131,115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1044	131,115	S1043	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1045	138,609	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S1046	138,609	S1045	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1047	138,609	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1048	131,115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR				

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1049	226,745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR				

		H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1050	365,944	S1047 S1048 S1049	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1051	131,115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR				

		H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1052	131,115	S1051	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1053	100,965	S1051 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1054	100,965	S1053	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1055	226,745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR				

		H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1056	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1057	231,903	S1056 S1055	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1058	4,213	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1059	4,213	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1060	4,213	S1058 S1059	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1061	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1062	75,707	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1063	80,565	S1061 S1062	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1064	131,115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1065	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1066	134,409	S1064 S1065	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1067	226,745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR				

		H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1068	226,745	S1067	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1069	385,172	S1041 S1043 S1045 S1047 S1048 S1049 S1051 S1055 S1056 S1058 S1061 S1062 S1064 S1065 S1067	US-PGPUB; USPAT	OR	ON	2017/02/17 11:45
S1070	304,007	S1069 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:45
S1071	58,345	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:47
S1072	3,397	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1071	US-PGPUB; USPAT	OR	ON	2017/02/17 11:47
S1073	13,696	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1069	US-PGPUB; USPAT	OR	ON	2017/02/17 11:48
S1074	11,715	S1070 and S1073	US-PGPUB; USPAT	OR	ON	2017/02/17 11:49
S1075	4,245	S1074 and (surround multi$channel multipl$5 near2 chanel "5.1" mpeg$4 aes$3)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:50
S1076	3,345	S1074 and (surround multi$channel multipl$5 near2 chanel "5.1" mpeg$4 aes$3) and wireless$4	US-PGPUB; USPAT	OR	ON	2017/02/17 11:51

S1077	2,466	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:52
S1078	3,193	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:53
S1079	1,829	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2017/02/17 11:55
S1080	572	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).clm. and pair$4	US-PGPUB; USPAT	OR	ON	2017/02/17 11:56
S1081	196	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	2017/02/17 11:56
S1082	4	("8588949" "8938312" "9202509" "9219959").pn.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:56
S1083	861,352	((G06F3/165 OR G06F3/04842 OR G06F3/162 OR G06F17/30026 OR G06F17/30283 OR G06F3/0482 OR G06F3/04847 OR G06F3/04855 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR H04R2420/01 OR H04R2420/07 OR H04R2430/01 OR H04R29/008 OR H04R3/00 OR H04R3/12 OR H04R5/04 OR H04S7/30 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/00 OR H04S7/308 OR G05B15/02 OR G11B19/02 OR G11B27/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/20 OR H03G3/3026 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106).CPC. OR (1/1 OR 700/94 OR 381/104 OR 381/105 OR 381/106 OR 381/107 OR 381/108 OR 381/109 OR 715/716).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:57
S1084	1,038	S1079 and S1083	US-PGPUB; USPAT	OR	ON	2017/02/17 11:58
S1085	354	(S1080 S1081) and S1083	US-PGPUB; USPAT	OR	ON	2017/02/17 11:58

S1086	256	("20130243199" | "20010043456" | "20010050991" | "20020072816" | "20020072817" | "20020078293" | "20020101357" | "20020124097" | "20020131761" | "20020137505" | "20020165921" | "20030014486" | "20030043856" | "20030063755" | "20030103088" | "20030167335" | "20030179780" | "20030185400" | "20030198257" | "20030212802" | "20030219007" | "20030231208" | "20040001591" | "20040014426" | "20040019807" | "20040037433" | "20040042629" | "20040059842" | "20040117462" | "20040168081" | "20040171346" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040249490" | "20040253969" | "20050060435" | "20050131558" | "20050154766" | "20050160270" | "20050197725" | "20060072489" | "20060173844" | "20060222186" | "20060227985" | "20060259649" | "20060270395" | "20070087686" | "20080075295" | "20080205070" | "20080303947" | "20090011798" | "20090070434" | "20090124289" | "20100087089" | "20110001632" | "20110316768" | "20150365987" | "3956591" | "4105974" | "4306114" | "4509211" | "4530091" | "4701629" | "4731814" | "4824059" | "4845751" | "4994908" | "5086385" | "5151922" | "5182552" | "5237327" | "5272757" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5481251" | "5515345" | "5553314" | "5625350" | "5640388" | "5661665" | "5740235" | "5742623" | "5761320" | "5774016" | "5790543" | "5812201" | "5818948" | "5832024" | "5848152" | "5852722" | "5875233" | "5905768" | "5946343" | "5956025" | "5960006" | "5984512" | "5987611" | "5990884" | "5991307" | "5999906" | "6018376" | "6029196" | "6038614" | "6046550" | "6061457" | "6081266" | "6088063" | "6101195" | "6127941" | "6148205" | "6169725" | "6181383" | "6195435" | "6212282" | "6246701" | "6269406" | "6301012" | "6310652" | "6313879" | "6321252" | "6353172" | "6356871" |	US-PGPUB; USPAT	OR	ON	2017/02/17 12:04

		"6418150" | "6442443" | "6449642" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6535121" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6704421" | "6741961" | "6778073" | "6816510" | "6826283" | "6859460" | "6859538" | "6873862" | "6901439" | "6915347" | "6919771" | "6931557" | "6937988" | "6987767" | "7046677" | "7092528" | "7092694" | "7096169" | "7120168" | "7130316" | "7136934" | "7139981" | "7146260" | "7161939" | "7197148" | "7206618" | "7260616" | "7263110" | "7277547" | "7289631" | "7295548" | "7305694" | "7308188" | "7324857" | "7356011" | "7366206" | "7428310" | "7430181" | "7457948" | "7472058" | "7492912" | "7505889" | "7548744" | "7548851" | "7558224" | "7558635" | "7627825" | "7630501" | "7653344" | "7675943" | "7676044" | "7676142" | "7688306" | "7721032" | "7746906" | "7761176" | "7831054" | "7853341" | "7882234" | "7933418" | "7945636" | "7945708" | "7966388" | "7987294" | "7995732" | "8041062" | "8050203" | "8150079" | "8170222" | "8233029" | "8311226" | "8374595" | "8411883" | "8442239" | "8477958" | "8565455" | "8600084" | "8654995" | "8861739" | "8942395" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023" | "D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271").PN.				
S1087	3	S1086 and moore.in.	US-PGPUB; USPAT	OR	ON	2017/02/17 12:04
S1088	8	("20040014426" "20070087686" "7987294" "6487296" "20040037433" "5361381" "7853341" "7653344").pn.	US-PGPUB; USPAT	OR	ON	2017/02/17 12:05

S1089	10	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/02/17 12:18
S1092	262	("4712105" | "7710941" | "20120051567" | "20010043456" | "20010050991" | "20020072816" | "20020072817" | "20020078293" | "20020101357" | "20020124097" | "20020131761" | "20020137505" | "20020165921" | "20030014486" | "20030043856" | "20030063755" | "20030103088" | "20030167335" | "20030179780" | "20030185400" | "20030198257" | "20030212802" | "20030219007" | "20030231208" | "20040001591" | "20040014426" | "20040019807" | "20040037433" | "20040042629" | "20040059842" | "20040117462" | "20040168081" | "20040171346" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040249490" | "20040253969" | "20050060435" | "20050131558" | "20050154766" | "20050160270" | "20050197725" | "20060072489" | "3956591" | "4105974" | "4306114" | "4509211" | "4530091" | "4701629" | "4731814" | "4824059" | "4845751" | "4994908" | "5086385" | "5151922" | "5182552" | "5237327" | "5272757" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5481251" | "5515345" | "5553314" | "5625350" | "5640388" | "5661665" | "5740235" | "5742623" | "5761320" | "5774016" | "5790543" | "5812201" | "5818948" | "5832024" | "5848152" | "5852722" | "5875233" | "5905768" | "5946343" | "5956025" | "5960006" | "5984512" | "5987611" | "5990884" | "5991307" | "5999906" | "6018376" | "6029196" | "6038614" | "6046550" | "6061457" | "6081266" | "6088063" | "6101195" | "6127941" | "6148205" | "6169725" | "6181383" | "6195435" | "6212282" | "6246701" | "6269406" | "6301012" | "6310652" | "6313879" | "6321252" | "6353172" | "6356871" | "6418150" | "6442443" | "6449642" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" |	US-PGPUB; USPAT	OR	ON	2017/02/28 12:40

		"6535121" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6704421" | "6741961" | "6778073" | "6816510" | "6826283" | "6859460" | "6859538" | "6873862" | "6901439" | "6915347" | "6919771" | "6931557" | "6937988" | "6987767" | "7046677" | "7092528" | "7092694" | "7096169" | "7120168" | "7130316" | "7136934" | "7139981" | "7146260" | "7161939" | "7197148" | "7206618" | "7260616" | "7263110" | "7277547" | "7289631" | "7295548" | "7305694" | "7308188" | "7324857" | "7356011" | "7366206" | "7428310" | "7430181" | "7457948" | "7472058" | "7492912" | "7505889" | "7548744" | "7548851" | "7558224" | "7558635" | "7627825" | "7630501" | "7653344" | "7675943" | "7676044" | "7676142" | "7688306" | "7721032" | "7746906" | "7761176" | "7831054" | "7853341" | "7882234" | "7933418" | "7945636" | "7945708" | "7966388" | "7987294" | "7995732" | "8041062" | "8050203" | "8150079" | "8170222" | "8233029" | "8311226" | "8374595" | "8411883" | "8442239" | "8477958" | "8565455" | "8600084" | "8654995" | "8861739" | "8942395" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023" | "D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271" | "D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246").PN.				
S1093	143	("D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" |	US-PGPUB; USPAT	OR	ON	2017/02/28 12:40

		"D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "20060173844" | "20060222186" | "20060227985" | "20060259649" | "20060270395" | "20070087686" | "20080075295" | "20080205070" | "20080303947" | "20090011798" | "20090070434" | "20090124289" | "20100087089" | "20110001632" | "20110316768" | "20150365987" | "20040185773" | "20050154766" | "20060222186" | "20060259649" | "20070087686" | "20080205070" | "20080303947" | "20090124289" | "20100087089" | "20110001632" | "3956591" | "4105974" | "4306114" | "5182552" | "5440644" | "5625350" | "5774016" | "5875233" | "6535121" | "6873862" | "7161939" | "7308188" | "7472058" | "7558635" | "7721032" | "7761176" | "7945708" | "7995732" | "8041062" | "8233029" | "8654995" | "8423893" | "8521316" | "20040015252" | "20040237750" | "20060173972" | "20060205349" | "20080077261" | "20080092204" | "20080152165" | "20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "5923902" | "6256554" | "6404811" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7483538" | "7571014" | "7643894" | "7657910" | "7853341" | "8014423" | "8045952" | "8103009" | "8234395" | "None" | "20080215169" | "20090251604" | "20110228944" | "20140256260" | "20040081099" | "6999827" | "7302468" | "7728911" | "7908637" | "7930644" | "8054987" | "8055353" | "8275307" | "8639370" | "8938312" | "20100054709" | "20050281138" | "20040031853" | "20020072816" | "20020098878" | "20030023329" | "20040239816" |			

		"20050100174" | "20060029005" | "20060089735" | "20060229752" | "20100274372").PN.				
S1094	379	S1092 S1093	US-PGPUB; USPAT	OR	ON	2017/02/28 12:40
S1095	75,974	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1096	131,466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1097	138,968	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

S1098	138,968	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1099	131,466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1100	227,696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR				

		H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1101	131,466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1102	227,696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR				

		H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1103	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1104	4,222	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1105	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1106	75,974	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1107	131,466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR				

		H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1108	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1109	227,696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR				

		H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1110	386,374	S1095 S1096 S1097 S1098 S1099 S1100 S1101 S1102 S1103 S1104 S1105 S1106 S1107 S1108 S1109	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1111	305,122	S1110 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1112	13,745	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1110	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1113	11,762	S1111 and S1112	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1114	1,842	S1113 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1115	880,516	((G06F3/165 OR G06F3/04842 OR G06F3/162 OR G06F17/30026 OR G06F17/30283 OR G06F3/0482 OR G06F3/04847 OR G06F3/04855 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR H04R2420/01 OR H04R2420/07 OR H04R2430/01 OR H04R29/008 OR H04R3/00 OR H04R3/12 OR H04R5/04 OR H04S7/30 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/00 OR H04S7/308 OR G05B15/02 OR G11B19/02 OR G11B27/00 OR G11B27/10 OR H02B1/00	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		OR H03G3/10 OR H03G3/20 OR H03G3/3026 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106).CPC. OR (1/1 OR 700/94 OR 381/104 OR 381/105 OR 381/106 OR 381/107 OR 381/108 OR 381/109 OR 715/716).CCLS.)				
S1116	1,051	S1114 and S1115	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1117	1,331	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1118	15,625	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1119	16,704	S1117 S1118	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1120	21	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1121	12,295	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1122	11,605	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1123	37,335	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1124	34,922	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1125	41,076	S1121 S1122 S1123 S1124	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1126	76,417	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1127	132,061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR				

		H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1128	139,524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1129	139,524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S1130	132,061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1131	229,330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR				

		G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1132	132,061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR				

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1133	229,330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR				

		H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1134	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1135	4,243	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1136	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1137	76,417	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1138	132,061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				

S1139	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1140	229,330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR				

		G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1141	388,327	S1126 S1127 S1128 S1129 S1130 S1131 S1132 S1133 S1134 S1135 S1136 S1137 S1138 S1139 S1140	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1142	306,969	S1141 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1143	13,828	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1141	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1144	11,841	S1142 and S1143	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1145	1,869	S1144 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1146	1	"14304410"	US-PGPUB; USPAT	OR	ON	2017/03/15 13:05
S1147	49	baudino.in. and local	US-PGPUB; USPAT	OR	ON	2017/03/15 13:06
S1148	51	baudino.in. and local$4	US-PGPUB; USPAT	OR	ON	2017/03/15 13:06
S1149	6	baudino.in. and local$4 and surround	US-PGPUB; USPAT	OR	ON	2017/03/15 13:06
S1150	11	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/03/15 13:12
S1151	1	"20150180434"	US-PGPUB; USPAT	OR	ON	2017/03/15 13:12
S1152	17,010	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR	US-PGPUB; USPAT	OR	ON	2017/03/15 13:13

		H04S7/30).CPC. OR (700/94 381/107).CCLS.)				
S1153	1,078	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/03/15 13:13
S1154	85	S1145 and S1153	US-PGPUB; USPAT	OR	ON	2017/03/15 13:13
S1155	67	S1145 and S1153 not sonos.as.	US-PGPUB; USPAT	OR	ON	2017/03/15 13:14
S1156	24	("5937176" | "20030170009" | "7690017" | "20060215630" | "8396578" | "20070143801" | "20070143801" | "6892167" | "20050237952" | "20060248173" | "20060233120" | "5675390" | "8266516" | "20060165385" | "4710917" | "6522646" | "20090089813" | "7668964" | "6711647" | "20050041604" | "20070091906" | "20040054689" | "6202211" | "8335576" | "20030055635").PN.	US-PGPUB; USPAT	OR	ON	2017/03/15 13:25
S1157	1	S1156 and "6202211"	US-PGPUB; USPAT	OR	ON	2017/03/15 13:27
S1179	76,512	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1180	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1181	139,622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S1182	139,622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

S1183	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1184	229,627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1185	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1186	229,627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR				

		G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1187	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1188	4,247	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1189	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1190	76,512	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S1191	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1192	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1193	229,627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR				

		G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1194	388,692	S1179 S1180 S1181 S1182 S1183 S1184 S1185 S1186 S1187 S1188 S1189 S1190 S1191 S1192 S1193	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1195	13,865	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1194	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

S1196	4,103	S1179 and S1195	US-PGPUB; USPAT	OR	ON	2017/03/18 15:09
S1197	2,164	S1196 and (bond$4 exclus$6 dynamic$6)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:11
S1198	681	S1196 and (bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:11
S1199	1,311	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	2017/03/18 15:12
S1200	1,267	S1199 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:12
S1201	347	S1199 and (stereo mono monaural left right) and S1179	US-PGPUB; USPAT	OR	ON	2017/03/18 15:15
S1202	805	S1196 and (bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot network$4)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:15
S1203	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				

S1204	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23
S1205	5,920	S1203 and S1204	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23
S1206	55	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1205	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23
S1207	347	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1201	US-PGPUB; USPAT	OR	ON	2017/03/18 15:24
S1208	347	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1201	US-PGPUB; USPAT	OR	ON	2017/03/18 15:25
S1209	347	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with (diverg$5 uniqu$6 original$5 different) near3 (song media content) and (sync synchron$8) and S1201	US-PGPUB; USPAT	OR	ON	2017/03/18 15:26
S1210	295	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with (diverg$5 uniqu$6 original$5 different) near3 (song media content) and (sync synchron$8) and S1198	US-PGPUB; USPAT	OR	ON	2017/03/18 15:28
S1211	295	S1209 and S1210	US-PGPUB; USPAT	OR	ON	2017/03/18 15:28
S1212	29	S1205 and S1210	US-PGPUB; USPAT	OR	ON	2017/03/18 15:29
S1213	6,109,604	s "167"	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1214	229,627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41

		H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR				

		G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S1215	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1216	4,054	S1215 and S1214	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41

S1217	71	S1216 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1218	71	S1217	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1219	1,350	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:44
S1220	1,350	S1219	US-PGPUB; USPAT	OR	ON	2017/03/18 15:44
S1221	139,622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1222	139,622	S1221	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1223	4,247	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1224	304	S1223 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45

S1225	5	S1224 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1226	5	S1225	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1227	5,605	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/18 15:52
S1228	132,177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01

		G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1229	9,207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1230	5,920	S1228 and S1229	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1231	2,768	(output pair$5 channel surround$4 lfe) same config$8 and S1230	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1232	3,536	(output pair$5 channel surround$4 lfe) same (zone scene config$8 snap$shot network$4) and S1230	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01

S1233	1	"2005004532"	US-PGPUB; USPAT	OR	ON	2017/03/18 16:33
S1265	6,195	group$6 with volume near2 (control$4 adjust$6 command$4 instruct$4)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:38
S1266	2,631,640	second near4 (volume device control$4 adjust$6 command$4 instruct$5)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:38
S1267	15	upnp$4 with adjust$6 near2 (volume gain amplitude)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:39
S1269	900	upnp$4 and adjust$6 near2 (volume gain amplitude)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:44
S1270	240	upnp$4 and adjust$6 near2 (volume gain amplitude) same network$4	US-PGPUB; USPAT	OR	ON	2017/03/21 11:45
S1271	3	upnp$4 and adjust$6 near2 (volume gain amplitude) same network$4 and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	2017/03/21 11:45
S1272	15	upnp$4 and adjust$6 near2 (volume gain amplitude) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	2017/03/21 11:45
S1273	599	(surround "5.1" "7.1") with mix$4 and volume near3 group$6	US-PGPUB; USPAT	OR	ON	2017/03/21 11:53
S1274	611	(surround "5.1" "7.1") with mix$4 and volume near3 (bus group$6)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:53
S1275	1,275	(surround "5.1" "7.1") with mix$4 and (gain volume level amplitude) near3 (bus group$6)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:53
S1276	345	(surround "5.1" "7.1") with mix$4 and (gain volume level amplitude) near3 (bus group$6) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	2017/03/21 11:53
S1277	0	shdema.in. and upnp$4	US-PGPUB; USPAT	OR	ON	2017/03/21 12:57
S1278	1	"20030086580" and (gain volume level amplitude) near3 (bus group$6) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	2017/03/21 13:03
S1304	761	((G06F3/165 g06f3/162).CPC. and (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:36

S1305	10,981	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:36
S1306	225,743	($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:36
S1307	27,436	($6zone scene configu$8) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:37
S1308	546	S1307 and S1305	US-PGPUB; USPAT	OR	ON	2017/03/27 16:39
S1309	10,278	($6zone scene configu$8) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8) near6 (display$5)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:39
S1310	10,371	($6zone scene configu$8 snap$shot) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8 snap$shot) near6 (display$5)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:40
S1311	1	"20160026429"	US-PGPUB; USPAT	OR	ON	2017/03/27 16:40
S1312	453	S1307 and S1305 not sonos.as.	US-PGPUB; USPAT	OR	ON	2017/03/27 16:42
S1313	308	S1307 and S1305 not sonos.as. and @ad<="20140723"	US-PGPUB; USPAT	OR	ON	2017/03/27 16:42
S1314	2	("2009/0171677").URPN.	USPAT	OR	ON	2017/03/27 16:52
S1315	9	("20030182001" | "20060069828" | "20070079308" | "20090119684" | "20090171677" | "5703794" | "6904475" | "7743389" | "8250573").PN. OR ("8972984").URPN.	US-PGPUB; USPAT	OR	ON	2017/03/27 16:53
S1316	1,314	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	2017/03/27 16:53
S1317	9	("2008/0141134").URPN.	USPAT	OR	ON	2017/03/27 16:55

S1318	9,129	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:55
S1319	351	S1310 and S1308	US-PGPUB; USPAT	OR	ON	2017/03/27 16:56
S1320	71	S1310 and S1304	US-PGPUB; USPAT	OR	ON	2017/03/27 16:57
S1321	21	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2017/03/27 17:27
S1322	341	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 "not" near2 display$4)	US-PGPUB; USPAT	OR	ON	2017/03/27 17:28
S1323	1	"not" near2 display$6	US-PGPUB; USPAT	OR	ON	2017/03/27 17:28
S1324	5	"not" with display$6	US-PGPUB; USPAT	OR	ON	2017/03/27 17:29
S1325	357,787	(without "not") with display$6	US-PGPUB; USPAT	OR	ON	2017/03/27 17:43
S1326	160,219	(without "not" does) near3 display$6	US-PGPUB; USPAT	OR	ON	2017/03/27 17:43
S1327	1,136	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6)	US-PGPUB; USPAT	OR	ON	2017/03/27 17:44
S1328	210	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot)	US-PGPUB; USPAT	OR	ON	2017/03/27 17:44
S1329	0	("2016/0378426").URPN.	USPAT	OR	ON	2017/03/27 17:50
S1330	14	("2011/0185036").URPN.	USPAT	OR	ON	2017/03/27 17:51
S1331	102	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3	US-PGPUB; USPAT	OR	ON	2017/03/27 17:55

		display$6) same (group$6 zone config$8 scene snap$shot) and $5speaker				
S1332	57	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and $5speaker same (scene config$6 zone network$4 snap$shot group$6)	US-PGPUB; USPAT	OR	ON	2017/03/27 17:56
S1333	162	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/27 18:43
S1334	40	S1332 and S1333	US-PGPUB; USPAT	OR	ON	2017/03/27 18:44
S1335	12,434	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1336	11,734	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1337	37,769	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1338	35,330	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1339	41,526	S1335 S1336 S1337 S1338	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1340	144	(S1335 S1336 S1337 S1338) and S1304	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1341	293	S1339 and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/27 18:56
S1342	5	("2012/0210225").URPN.	USPAT	OR	ON	2017/03/27 18:59

S1364	1	("5440644" | "5761320" | "6032202" | "6469633" | "7295548" | "7630501" | "7987294" | "8483853" | "None").PN. and undefin$4	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1365	1	"20160026428"	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1366	12,465	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1367	11,763	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1368	37,880	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1369	35,436	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1370	41,640	S1366 S1367 S1368 S1369	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1371	295	S1370 and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1372	295	S1370 and (unshown invisible undisplay$4 ($undefin$6 without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1373	342	S1370 and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:24
S1374	11,885	($6zone scene configu$8 set$4up snap$3shot cad)same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:25
S1375	35,617	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:25

S1376	342	(S1366 S1368 S1374 S1375 S1367 S1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:25
S1377	10,274	S1366 and high$4	US-PGPUB; USPAT	OR	ON	2017/03/31 16:27
S1378	1	S1365 and high$4	US-PGPUB; USPAT	OR	ON	2017/03/31 16:27
S1379	339	(S1366 S1368 S1374 S1375 S1367 S1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface) and (strength power signal)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:28
S1380	47	(S1366 S1368 S1374 S1375 S1367 S1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface) and (strength power) near2 signal	US-PGPUB; USPAT	OR	ON	2017/03/31 16:28
S1381	51,624	((G06F3/165 OR H04L67/02 OR H04L67/10 OR H04R2227/005 OR H04R29/007).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:29
S1382	33	S1376 and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 16:29
S1383	2	S1380 and S1382	US-PGPUB; USPAT	OR	ON	2017/03/31 16:29
S1384	78	S1380 S1382	US-PGPUB; USPAT	OR	ON	2017/03/31 16:29
S1385	342	(S1366 S1368 S1374 S1375 S1367 S1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:30

		near2 interface) and (time season day month year strength power signal)				
S1386	33	S1381 and S1385	US-PGPUB; USPAT	OR	ON	2017/03/31 16:44
S1387	1,244	(S1366 S1368 S1374 S1375 S1367 S1369) and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 16:44
S1388	101	(S1366 S1368 S1374 S1375 S1367 S1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 16:45
S1389	0	mccord and morganstern	US-PGPUB; USPAT	OR	ON	2017/03/31 16:55
S1390	15	mccord and sonos	US-PGPUB; USPAT	OR	ON	2017/03/31 16:55
S1391	5,641	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/31 17:01
S1392	5,654	(scene config$8 snap$shot network$4 zone set$up cad) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/31 17:02
S1393	278	(S1366 S1368 S1374 S1375 S1367 S1369) and S1392 and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 17:04
S1394	5,560	(scene config$6 zone network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2017/03/31 17:14
S1395	5,560	(scene config$6 zone network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1392	US-PGPUB; USPAT	OR	ON	2017/03/31 17:14
S1396	964	(scene config$6 zone network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 17:14
S1397	964	S1395 and S1396	US-PGPUB; USPAT	OR	ON	2017/03/31 17:16

S1479	9	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/04/21 08:38
S1480	1	"20150058727"	US-PGPUB; USPAT	OR	ON	2017/04/21 08:38
S1481	60,297	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:39
S1482	1,653	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:39
S1483	6,992	S1481 and (speaker loud$speaker transducer) with (network$4 wireless intelligent smart)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:40
S1484	385	S1482 and (speaker loud$speaker transducer) with (network$4 wireless intelligent smart)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:40
S1485	1	"20150286360"	US-PGPUB; USPAT	OR	ON	2017/04/21 09:39
S1486	1	"8290603".pn.	US-PGPUB; USPAT	OR	ON	2017/04/21 09:39
S1487	0	"20150058727" and group near2 scene	US-PGPUB; USPAT	OR	ON	2017/04/21 10:16
S1488	1	"20150058727" and (multi$zone and group$4 with scene)	US-PGPUB; USPAT	OR	ON	2017/04/21 10:17
S1489	1	S1486 and (multi$zone and group$4 with scene)	US-PGPUB; USPAT	OR	ON	2017/04/21 10:20
S1490	1	S1486 and (multi$zone and group$4 with scene) and party	US-PGPUB; USPAT	OR	ON	2017/04/21 10:20
S1491	14	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/04/21 10:37

S1492	1	"20160364206" and group near2 scene	US-PGPUB; USPAT	OR	ON	2017/04/21 10:37
S1493	0	"20160364206" and display$6 with second near3 group$4	US-PGPUB; USPAT	OR	ON	2017/04/21 10:43
S1494	4,424	party with mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	2017/04/21 10:50
S1495	391	party near2 mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	2017/04/21 10:50
S1496	0	"8290603".pn. and applu	US-PGPUB; USPAT	OR	ON	2017/04/21 10:51
S1497	1	"8290603".pn. and apply	US-PGPUB; USPAT	OR	ON	2017/04/21 10:51
S1498	863	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	2017/04/21 10:52
S1499	7	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	2017/04/21 10:53
S1500	15	party near2 mode with (icon display$6 control$6 command$6) same $5speaker	US-PGPUB; USPAT	OR	ON	2017/04/21 10:54
S1501	8	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not S1499	US-PGPUB; USPAT	OR	ON	2017/04/21 10:54
S1502	8	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not S1499 and party near2 mode	US-PGPUB; USPAT	OR	ON	2017/04/21 10:55
S1503	1	"8483853".pn.	US-PGPUB; USPAT	OR	ON	2017/04/21 10:57
S1512	5	"2101795"	US-PGPUB; USPAT	OR	ON	2017/04/21 17:09
S1525	32	"5625697" "20050254640"	US-PGPUB; USPAT	OR	ON	2017/04/22 07:45
S1526	1	"20150286360"	US-PGPUB; USPAT	OR	ON	2017/04/24 15:01

S1527	1	"Term Removed" and physic$6	US-PGPUB; USPAT	OR	ON	2017/04/24 15:07
S1528	3	"Term Removed" and (push$button push$4)	US-PGPUB; USPAT	OR	ON	2017/04/24 15:10
S1529	3	"Term Removed" and (interface)	US-PGPUB; USPAT	OR	ON	2017/04/24 15:14
S1530	6	"Term Removed" and attach$4	US-PGPUB; USPAT	OR	ON	2017/04/24 15:16
S1531	4	"Term Removed" and integ$6	US-PGPUB; USPAT	OR	ON	2017/04/24 15:18
S1532	7	"Term Removed" and upon	US-PGPUB; USPAT	OR	ON	2017/04/24 15:21
S1566	10	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	2018/08/08 16:11
S1567	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not S1566 and party near2 mode	US-PGPUB; USPAT	OR	ON	2018/08/08 16:11
S1568	13	"Term Removed"	US-PGPUB; USPAT	OR	ON	2018/08/08 16:11
S1569	2	"20150180434"	US-PGPUB; USPAT	OR	ON	2018/08/08 16:12
S1570	2	S1569 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC. OR (381/107 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13
S1571	23,157	((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC. OR (381/107 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13
S1572	150,204	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1573	1,149	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S1572	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13
S1574	1,149	S1573	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13
S1575	5,595	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:16
S1576	5,595	S1575	US-PGPUB; USPAT	OR	ON	2018/08/08 16:16
S1577	5,595	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:17
S1578	39,329	(eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:17
S1579	1,702,646	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	2018/08/08 16:18
S1580	40,904	(output pair$5 channel surround$4) with config$8 and S1572	US-PGPUB; USPAT	OR	ON	2018/08/08 16:18

S1581	59,540	(output pair$5 channel surround$4) with (kind type config$8) and S1572	US-PGPUB; USPAT	OR	ON	2018/08/08 16:23
S1582	1,852	S1581 and S1578	US-PGPUB; USPAT	OR	ON	2018/08/08 16:23
S1583	1,186	(zone scene config$9) with play$4 and S1582	US-PGPUB; USPAT	OR	ON	2018/08/08 16:24
S1584	1,071	(zone scene config$9) with play$4 same (eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:24
S1585	1	"20070087686"	US-PGPUB; USPAT	OR	ON	2018/08/08 16:25
S1586	10,214	((H04H40/36 OR H04R2205/024 OR H04R2420/05 OR H04R2420/07 OR H04S3/00 OR H04S7/30 OR H04S7/301 OR H04S7/308).CPC. OR (455/3.06).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:25
S1587	211	S1586 and S1584	US-PGPUB; USPAT	OR	ON	2018/08/08 16:25
S1588	1	"20070087686" and (eq equal$9 process$6)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:26
S1589	1	"20070087686" and (frequen$6)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:32
S1590	50	"Term Removed"	US-PGPUB; USPAT	OR	ON	2018/08/08 16:37
S1591	4	S1590 and S1578	US-PGPUB; USPAT	OR	ON	2018/08/08 16:38
S1592	18	(output pair$5 channel surround$4) with config$8 and S1590	US-PGPUB; USPAT	OR	ON	2018/08/08 16:42
S1593	16	(output pair$5 channel surround$4) with config$8 and S1590 not S1591	US-PGPUB; USPAT	OR	ON	2018/08/08 16:42
S1594	13	(output pair$5 channel surround$4) with config$8 and S1590 and (eq equal$9)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:45

S1595	17	(output pair$5 channel surround$4) with config$8 and S1590 and (eq equal$9 frequenc$4)	US-PGPUB; USPAT	OR	ON	2018/08/08 16:45
S1596	59	("2008/0077261").URPN.	USPAT	OR	ON	2018/08/08 16:49
S1597	30	("2008/0077261").URPN. not mccord	USPAT	OR	ON	2018/08/08 16:49
S1598	1,030	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020015003" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" | "20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" | "20030020763" | "20030023741" | "20030031333" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030055892" | "20030061428" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030091322" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030110329" | "20030126211" |	US-PGPUB; USPAT	OR	ON	2018/08/08 16:51

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S1601	415	("2004/0024478").URPN.	USPAT	OR	ON	2018/08/08 17:17
S1602	3	S1599 and S1601	USPAT	OR	ON	2018/08/08 17:21
S1603	1,746,053	(output pair$5 channel surround$4) with config$8 S1578 S1581	US-PGPUB; USPAT	OR	ON	2018/08/08 17:22
S1604	720	S1603 and (S1598 S1601)	US-PGPUB; USPAT	OR	ON	2018/08/08 17:22
S1605	344	S1603 and (S1601)	US-PGPUB; USPAT	OR	ON	2018/08/08 17:22
S1606	104	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2018/08/08 17:23
S1607	85	S1606 and S1603	US-PGPUB; USPAT	OR	ON	2018/08/08 17:24
S1608	65,108	second near3 (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2018/08/08 17:27
S1609	119,610	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2018/08/08 17:28
S1610	2,408	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device) and S1578	US-PGPUB; USPAT	OR	ON	2018/08/08 17:28
S1611	268	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device) same S1578	US-PGPUB; USPAT	OR	ON	2018/08/08 17:28

S1612	8	("2015/0289124").URPN.	USPAT	OR	ON	2018/08/08 17:56
S1613	20,186	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2018/08/08 18:08
S1614	150,204	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR	US-PGPUB; USPAT	OR	ON	2018/08/08 18:10

		G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S1615	5,992	S1614 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2018/08/08 18:10
S1616	12,629	S1614 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2018/08/08 18:10
S1617	22	("20040196994" | "20040247144" | "20050147261" | "20050195995" | "20070030982" | "5500900" | "5622172" | "5751817" | "5802180" | "5943427" | "6118875" | "6498856" | "6990205" | "7116788" | "7174229" | "7590249").PN. OR ("8638946").URPN.	US-PGPUB; USPAT	OR	ON	2018/08/08 18:26
S1764	2,566	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2018/08/22 12:21
S1765	197	S1764 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10	US-PGPUB; USPAT	OR	ON	2018/08/22 12:21

		OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)				
S1766	969,440	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:28
S1767	228	"s1262"	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1768	20,344	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1769	20,344	S1768	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1770	24	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1771	24	S1770	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1772	10,063	S1766 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:29
S1773	824	S1766 and S1768 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:31
S1774	530,410	(input audio) with (activat$6 detect$6) same (output pair$5 channel surround$4)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:38
S1777	6,402,846	(zone snapshot snap adj shot grouping grouped groupwise scene configure configuration)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:52
S1778	2,566	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2018/08/22 12:52
S1779	2,566	S1778	US-PGPUB; USPAT	OR	ON	2018/08/22 12:52

S1780	197	S1778 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1781	197	S1780	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1782	969,440	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1783	969,440	S1782	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1784	228	"s1262"	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1785	228	S1784	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1786	20,344	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1787	20,344	S1786	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1788	228	S1784	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1789	20,344	S1786	US-PGPUB; USPAT	OR	ON	2018/08/22 12:54
S1790	20,344	S1789	US-PGPUB; USPAT	OR	ON	2018/08/22 12:54
S1791	24	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:54
S1792	24	S1791	US-PGPUB; USPAT	OR	ON	2018/08/22 12:54
S1793	10,063	S1782 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55

		OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)				
S1794	10,063	S1793	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1795	824	S1782 and S1786 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1796	824	S1795	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1797	530,410	(input audio) with (activat$6 detect$6) same (output pair$5 channel surround$4)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1798	530,410	S1797	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1799	530,410	S1797	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1800	666,516	S1777 and S1782	US-PGPUB; USPAT	OR	ON	2018/08/22 12:56
S1801	1,105	S1786 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:56
S1802	774	S1800 and S1801	US-PGPUB; USPAT	OR	ON	2018/08/22 12:56
S1803	0	("2018/0115825").URPN.	USPAT	OR	ON	2018/08/22 13:22
S1804	0	("2016/0253145").URPN.	USPAT	OR	ON	2018/08/22 13:22
S1805	28	("20050131558" | "20080109095" | "20100064218" | "20120096018" | "20120198339" | "20130132081" | "20130339031" | "20140095176" | "20140172953" | "20150081274" | "20150104037" | "20150139464" | "20150162006" | "20150170665" | "20150193193" | "20160034249" | "20160035352" | "20160210966" |	US-PGPUB; USPAT	OR	ON	2018/08/22 13:22

		"20160249437" | "20160295340" | "20160353217" | "20160379638" | "7643894" | "8725277" | "8874448" | "9087520" | "9271111" | "9484030").PN. OR ("9898250").URPN.				
S1806	66	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "20080152312" | "20090076881" | "20090179867" | "20090234476" | "20100017714" | "20100325239" | "20120054278" | "20130243199" | "20130317635" | "20130331970" | "20130339397" | "20140037107" | "20140093085" | "20140122590" | "20140146970" | "20140181659" | "20140230015" | "20140310058" | "20150179227" | "20150186110" | "20150237409" | "20150245138" | "20150286360" | "20160180248" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7921369" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8788080" | "8843500" | "8903526" | "9246866" | "9330096").PN.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:42
S1807	1	("2015/0237409").URPN.	USPAT	OR	ON	2018/08/22 13:43
S1808	373	active with audio with detect$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1809	2,333	activ$6 with audio with detect$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1810	969,440	(input audio) with (activat$6 detect$6)".ab,clm.'"	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1811	255,081	(input audio) with (activat$6 detect$6).ab,clm.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1812	28	(zone snapshot snap adj shot grouping grouped groupwise scene configure configuration) with play$4 and play$5 with different near3 (song media	US-PGPUB; USPAT	OR	ON	2018/08/22 13:45

		content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)				
S1813	21,846	((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 13:45
S1814	49,958	(line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6 activ$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 13:47
S1815	5,294	(line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6 activ$6).clm,ab.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:47
S1816	157,627	S1777 and S1811	US-PGPUB; USPAT	OR	ON	2018/08/22 13:47
S1817	3,660	S1813 and S1811	US-PGPUB; USPAT	OR	ON	2018/08/22 13:47
S1818	127	S1777 and S1813 and S1814	US-PGPUB; USPAT	OR	ON	2018/08/22 13:48
S1819	8	S1813 and S1815	US-PGPUB; USPAT	OR	ON	2018/08/22 13:50
S1922	0	"Term Removed" and nickname	US-PGPUB; USPAT	OR	ON	2018/11/30 11:12
S1923	5	"Term Removed" and nickname	US-PGPUB; USPAT	OR	ON	2018/11/30 11:13
S1924	35	nicknam$4 same stereo	US-PGPUB; USPAT	OR	ON	2018/11/30 11:13
S1925	998	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	2018/11/30 11:15
S1926	101,527	(second third nick) near2 nam$3 nick$name	US-PGPUB; USPAT	OR	ON	2018/11/30 11:16
S1927	46	S1925 and S1926	US-PGPUB; USPAT	OR	ON	2018/11/30 11:16

S1928	72	((second third nick) near2 nam$3 nick$name) same stereo	US-PGPUB; USPAT	OR	ON	2018/11/30 11:20
S1929	37	((second third nick) near2 nam$3 nick$name) same stereo not S1924	US-PGPUB; USPAT	OR	ON	2018/11/30 11:21
S1930	1	"Term Removed" and stereo	US-PGPUB; USPAT	OR	ON	2018/11/30 11:21
S1931	21,326	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2018/11/30 11:50
S1932	7,250	second near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 11:50
S1933	5,840	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2018/11/30 11:50
S1934	5,847	(zone scene config$9 snap$shot) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2018/11/30 11:50
S1935	225,443	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 11:51
S1936	5,941	S1926 and S1935	US-PGPUB; USPAT	OR	ON	2018/11/30 12:17
S1937	1,466	S1926 and S1935 and (stereo surround "5.1")	US-PGPUB; USPAT	OR	ON	2018/11/30 12:18
S1938	1	"20160342387"	US-PGPUB; USPAT	OR	ON	2018/11/30 12:18
S1939	52,187	((G06F17/30026 OR G06F3/04842 OR G06F3/162 OR G06F3/165 OR G11B19/02 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/308).CPC.)	US-PGPUB; USPAT	OR	ON	2018/11/30 12:19
S1940	275	S1939 and S1937	US-PGPUB; USPAT	OR	ON	2018/11/30 12:19

S1941	2	S1937 and wachter.in.	US-PGPUB; USPAT	OR	ON	2018/11/30 12:22
S1942	553	group$6 and wachter.in.	US-PGPUB; USPAT	OR	ON	2018/11/30 12:24
S1943	2	group$6 and pinch and wachter.in.	US-PGPUB; USPAT	OR	ON	2018/11/30 12:24
S1944	9	("20080177822" | "20090179867" | "20110273380" | "20120121105" | "20120184335" | "20120274664" | "20130019193" | "20130080955" | "8290603").PN.	US-PGPUB; USPAT	OR	ON	2018/11/30 12:27
S1945	32	("2013/0080955").URPN.	USPAT	OR	ON	2018/11/30 12:35
S1946	347,182	(scene config$6 zone network$4 snap$shot) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 13:02
S1947	413,139	(scene config$6 zone network$4 snap$shot map$6 group$4) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 13:04
S1948	410,155	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 13:05
S1949	347,182	S1946 and S1947	US-PGPUB; USPAT	OR	ON	2018/11/30 13:05
S1984	22	"s1873"	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1985	227,864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1986	102,325	(second third nick) near2 nam$3 nick$name	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1987	227,864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1988	6,011	S1986 and S1987	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1989	6,011	S1988	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12

S1990	1,483	S1986 and S1987 and (stereo surround "5.1")	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1991	1,483	S1990	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1992	1	"20160342387"	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1993	1	S1992	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1994	52,883	((G06F17/30026 OR G06F3/04842 OR G06F3/162 OR G06F3/165 OR G11B19/02 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/308).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1995	52,883	S1994	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1996	283	S1994 and S1990	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1997	283	S1996	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1998	14,369	($6zone scene configu$8 snap$shot) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8 snap$shot) near6 (display$5)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S1999	14,369	S1998	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2000	1,200	(zone scene config$9) with play$4 same (eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2001	4,975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17

S2002	315	S2001 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2003	27	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2004	21,659	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2005	63	S2004 and (S2001 S2002)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:25
S2006	27	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2007	27	S2006	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2008	27	S2007	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2009	999,322	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2010	10,717	S2009 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2011	10,717	S2010	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2012	10,717	S2010	US-PGPUB; USPAT	OR	ON	2019/01/04 17:28
S2013	10,717	S2012	US-PGPUB; USPAT	OR	ON	2019/01/04 17:28
S2014	470	party near2 mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 17:28

S2015	470	S2014	US-PGPUB; USPAT	OR	ON	2019/01/04 17:28
S2016	477,374	(bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:36
S2017	2,701,530	(output pair$5 channel surround$4) with (kind type config$8)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:37
S2018	21,659	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/01/04 17:37
S2019	1	"8290603".pn. and apply	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49
S2020	1	S2019	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49
S2021	1,009	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49
S2022	1,009	S2021	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49
S2023	1,009	S2021	US-PGPUB; USPAT	OR	ON	2019/01/04 17:58
S2024	10	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 17:58
S2025	10	S2024	US-PGPUB; USPAT	OR	ON	2019/01/04 17:58
S2026	20	party near2 mode with (icon display$6 control$6 command$6) same $5speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 17:58
S2027	20	S2026	US-PGPUB; USPAT	OR	ON	2019/01/04 17:58
S2028	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not S2024	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59
S2029	10	S2028	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59

S2030	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not S2024 and party near2 mode	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59
S2031	10	S2030	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59
S2032	1	"8483853".pn.	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59
S2033	1	S2032	US-PGPUB; USPAT	OR	ON	2019/01/04 17:59
S2034	3,458	"s1509"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:01
S2035	5,749	"s1510"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:01
S2036	49	baudino.in. and local	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2037	49	S2036	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2038	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2039	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2040	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2041	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2042	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR				

		H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2043	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR				

		H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2044	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2045	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR				

		H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2046	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2047	4,975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2048	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2049	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2050	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2051	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2052	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR				

		G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2053	462,039	S2038 S2039 S2040 S2041 S2042 S2043 S2044 S2045 S2046 S2047 S2048 S2049 S2050 S2051 S2052	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2054	376,490	S2053 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2055	18,386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2053	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

S2056	16,247	S2054 and S2055	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2057	2,869	S2056 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2058	2,869	S2057	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2059	16,247	S2056	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2060	52,818	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:04
S2061	9,225	S2048	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2062	9,225	S2046	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2063	94,737	S2038	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2064	1,870	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2065	1,870	S2064	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2066	21,659	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2067	21,659	S2066	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2068	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2069	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR				

		H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2070	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2071	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2072	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2073	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR				

		G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2074	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR				

		H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2075	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR				

		H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2076	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2077	4,975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2078	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2079	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2080	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2081	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

S2082	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR				

		H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2083	462,039	S2068 S2069 S2070 S2071 S2072 S2073 S2074 S2075 S2076 S2077 S2078 S2079 S2080 S2081 S2082	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2084	376,490	S2083 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2085	376,490	S2084	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2086	9,225	S2078	US-PGPUB; USPAT	OR	ON	2019/01/04 18:17
S2087	4,975	S2077	US-PGPUB; USPAT	OR	ON	2019/01/04 18:17
S2088	1,129	"s1090"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:18
S2089	155,341	S2072	US-PGPUB; USPAT	OR	ON	2019/01/04 18:18
S2090	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2091	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2092	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2093	162,655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2094	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2095	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR				

		H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2096	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2097	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR				

		H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2098	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2099	4,975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2100	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2101	94,737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2102	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2103	9,225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2104	287,861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR				

		G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2105	462,039	S2090 S2091 S2092 S2093 S2094 S2095 S2096 S2097 S2098 S2099 S2100 S2101 S2102 S2103 S2104	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2106	376,490	S2105 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2107	18,386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2105	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

S2108	16,247	S2106 and S2107	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2109	905	S2108 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab,clm. and pair$4	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2110	155,341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2111	7,343	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2110	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2112	2,683	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/01/04 18:26
S2113	73,090	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with audio)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:26
S2114	17	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 18:31
S2115	1,920,308	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:31

S2116	781,874	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:31
S2117	212,928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2118	212,928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2119	24,977	S2116 and S2117	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2120	11	"Term Removed"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2121	1	"20170223458"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:37
S2122	2,787	S2119 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:38
S2123	798	S2116 and S2117 and (eq equaliz$9).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:38
S2124	3,228	S2116 and S2117 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:38
S2125	933	S2124 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:38
S2126	3	("2017/0099538").URPN.	USPAT	OR	ON	2019/01/04 18:43
S2127	0	("2015/0067511").URPN.	USPAT	OR	ON	2019/01/04 18:44
S2128	781,874	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41
S2129	781,874	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41

S2130	212,928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41
S2131	3,228	S2129 and S2130 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41
S2132	798	S2129 and S2130 and (eq equaliz$9).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41
S2133	3	("2013/0097510").URPN.	USPAT	OR	ON	2019/01/05 12:18
S2134	19	("20050069153" | "20050119879" | "20060004583" | "20070033021" | "20090316930" | "20110038490" | "20110096933" | "20110135103" | "20110137643" | "20110238426" | "20110274281" | "20110274292" | "20130096926" | "20130097510" | "20130114830" | "5406634" | "5572443" | "8077880" | "8194874").PN. OR ("9307322").URPN.	US-PGPUB; USPAT	OR	ON	2019/01/05 12:25
S2135	3	("2007/0033021").URPN.	USPAT	OR	ON	2019/01/05 12:27
S2136	53	("2006/0004583").URPN.	USPAT	OR	ON	2019/01/05 12:40
S2137	108	("2013/0028443").URPN.	USPAT	OR	ON	2019/01/05 12:41
S2139	1,907	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2140	1,907	S2139	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2141	96,104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09

		OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2142	96,104	S2141	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2143	22,136	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2144	118	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2145	53,602	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:11
S2146	92,622	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:12
S2147	96,180	(scene config$6 zone network$4 snap$shot map$3 group$5 $6zone scene configu$8 set$4up snap$3shot cad) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:13

S2148	122,164	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic $6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:13
S2149	122,148	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:13
S2150	326	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/02/22 14:15
S2151	32,506	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:24
S2152	2,394	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:26
S2153	2,723	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:26
S2154	76	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:26
S2155	20	S2150 and S2151	US-PGPUB; USPAT	OR	ON	2019/02/22 14:26
S2156	53,602	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker	US-PGPUB; USPAT	OR	ON	2019/02/22 14:29

		transducer loud$5speaker playback near2 device).ab,clm.				
S2157	136,058	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:29
S2158	36,348	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:31
S2159	167	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6) and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:43
S2160	571	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6) and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:43
S2161	1,464	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:44
S2162	1,464	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:45
S2163	225	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:46
S2164	0	S2154 and S2163	US-PGPUB; USPAT	OR	ON	2019/02/22 14:46
S2165	31	S2148 and S2163	US-PGPUB; USPAT	OR	ON	2019/02/22 14:46

S2166	128	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6).ab,clm. and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:47
S2167	1,045	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:48
S2168	358	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.) and S2148	US-PGPUB; USPAT	OR	ON	2019/02/22 14:48
S2169	47,953	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/02/22 14:50
S2170	59,474	("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:51
S2171	312	S2169 and S2170	US-PGPUB; USPAT	OR	ON	2019/02/22 15:04
S2172	28	("2015/0223002").URPN.	USPAT	OR	ON	2019/02/22 15:05
S2173	96,104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2174	155,277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2175	152,826	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2176	152,826	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

S2177	155,277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2178	288,619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2179	155,277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2180	288,619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR				

		G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2181	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2182	5,012	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2183	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2184	96,104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2185	155,277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2186	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2187	288,619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR				

		G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2188	456,352	S2173 S2174 S2175 S2176 S2177 S2178 S2179 S2180 S2181 S2182 S2183 S2184 S2185 S2186 S2187	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2189	18,243	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2188	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

S2190	3,191	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2188 and S2170	US-PGPUB; USPAT	OR	ON	2019/02/22 15:35
S2191	37,788	S2188 and S2170	US-PGPUB; USPAT	OR	ON	2019/02/22 15:35
S2192	313,789	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6)	US-PGPUB; USPAT	OR	ON	2019/02/22 15:35
S2193	5,592	S2188 and S2169	US-PGPUB; USPAT	OR	ON	2019/02/22 15:36
S2194	273	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2188 and S2169	US-PGPUB; USPAT	OR	ON	2019/02/22 15:36
S2195	722	S2149 and S2188 and S2169	US-PGPUB; USPAT	OR	ON	2019/02/22 15:36
S2196	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2197	62,985	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2198	41,299	S2188 and S2197	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2199	3,261	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2198	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2200	1,272	S2188 and "323" and S2198	US-PGPUB; USPAT	OR	ON	2019/02/22 16:43
S2201	294	S2188 and S2169 and S2198	US-PGPUB; USPAT	OR	ON	2019/02/22 16:43
S2202	5,617	(S2197 S2188) and S2169	US-PGPUB; USPAT	OR	ON	2019/02/22 16:47
S2203	47,953	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:47

S2204	18,997	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8).ab,clm. and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6)	US-PGPUB; USPAT	OR	ON	2019/02/22 16:47
S2205	64,317	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:49
S2206	38,783	differen$6 near3 score	US-PGPUB; USPAT	OR	ON	2019/02/25 09:07
S2207	647	out near3 vocabulary and (includ$4 in) near3 vocabulary	US-PGPUB; USPAT	OR	ON	2019/02/25 09:08
S2208	508	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7	US-PGPUB; USPAT	OR	ON	2019/02/25 09:08
S2209	455	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7 and (featur$6)	US-PGPUB; USPAT	OR	ON	2019/02/25 09:09
S2210	84	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7 and (featur$6 near4 vector)	US-PGPUB; USPAT	OR	ON	2019/02/25 09:09
S2215	83,529	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:41
S2216	0	S2215 with volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/03/01 16:41
S2217	0	S2215 with volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:41
S2218	6,886	S2215 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/03/01 16:42
S2219	925	S2215 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:42
S2220	2,418	S2218 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:42

S2221	276	S2219 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:42
S2222	84	S2219 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:42
S2223	84,286	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94 381/119 715/1716).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2224	7,045	S2223 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2225	969	S2223 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2226	2,466	S2224 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2227	290	S2225 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2228	88	S2225 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/01 16:47
S2229	4	S2228 not S2222	US-PGPUB; USPAT	OR	ON	2019/03/01 16:48
S2230	2	("5737485" "5493540").pn.	US-PGPUB; USPAT	OR	ON	2019/03/03 14:14
S2231	72	("5737485" "5493540")	US-PGPUB; USPAT	OR	ON	2019/03/03 14:14
S2232	1,588,775	(train$6 learn$6 neural)	US-PGPUB; USPAT	OR	ON	2019/03/03 14:14
S2233	64	S2231 and S2232	US-PGPUB; USPAT	OR	ON	2019/03/03 14:14

S2234	22,355	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2235	22,355	S2234	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2236	798,725	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2237	215,571	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2238	25,617	S2236 and S2237	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2239	25,617	S2238	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2240	96,872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2241	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2242	153,592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2243	153,592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2244	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR				

		H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2245	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR				

		H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2246	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2247	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR				

		G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				

S2248	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2249	5,050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2250	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2251	96,872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

S2252	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2253	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2254	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR				

		H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2255	459,201	S2240 S2241 S2242 S2243 S2244 S2245 S2246 S2247 S2248 S2249 S2250 S2251 S2252 S2253 S2254	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2256	374,433	S2255 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2257	374,433	S2256	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2258	48,351	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

S2259	96,872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2260	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2261	153,592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2262	153,592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2263	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2264	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR				

		G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				

S2265	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2266	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2267	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2268	5,050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2269	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2270	96,872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2271	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2272	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2273	290,900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR				

		H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2274	459,201	S2259 S2260 S2261 S2262 S2263 S2264 S2265 S2266 S2267 S2268 S2269 S2270 S2271 S2272 S2273	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2275	275	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2274 and S2258	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2276	275	S2275	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2277	84,164	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:02
S2278	935	S2277 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:02
S2279	87	S2278 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:02
S2280	8	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/03/20 10:03
S2281	153,592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04

		G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2282	6,076	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2283	2,360	second near3 play$5 near4 (media song title) and S2281	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2284	561	S2282 and S2283	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2285	156,185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2286	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2287	5,855	S2285 and S2286	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2288	60	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2287	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2289	935	S2277 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:54
S2290	1	"Term Removed" and volume.ti.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:54
S2291	84,921	(700/94 381/119).ccls. ((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:55
S2292	855	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2291	US-PGPUB; USPAT	OR	ON	2019/03/20 10:55
S2293	67	S2292 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:56
S2294	94	S2292 and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:56
S2295	1,168	S2291 and (proportion$6 averag$4) and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 11:00
S2296	614	S2291 and (proportion$6 averag$4) near11 (gain level setting volume) and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 11:00
S2297	62	S2291 and (proportion$6 averag$4) near11 (gain level setting volume) and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/03/20 11:01

S2298	36	S2291 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/03/20 11:02
S2299	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/03/20 11:03
S2300	0	S2298 and S2299	US-PGPUB; USPAT	OR	ON	2019/03/20 11:03
S2301	27	S2291 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728" and group$6	US-PGPUB; USPAT	OR	ON	2019/03/20 11:03
S2302	70,874	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2019/05/24 14:38
S2303	39,758	"2203"	US-PGPUB; USPAT	OR	ON	2019/05/24 14:38
S2309	2,834	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/05/24 15:20
S2310	2,834	S2309	US-PGPUB; USPAT	OR	ON	2019/05/24 15:20
S2311	76,717	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with audio)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2312	76,717	S2311	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2313	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2314	19	S2313	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2315	1,996,633	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21

S2316	1,996,633	S2315	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2317	815,239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2318	218,212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2319	26,224	S2317 and S2318	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2320	26,224	S2319	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2321	815,239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2322	218,212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2323	837	S2321 and S2322 and (eq equaliz$9).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2324	837	S2323	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2325	1,983	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:25
S2326	1,983	S2325	US-PGPUB; USPAT	OR	ON	2019/05/24 15:25
S2327	22,994	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/05/24 15:26
S2328	22,994	S2327	US-PGPUB; USPAT	OR	ON	2019/05/24 15:26
S2329	120	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/05/24 15:26
S2330	120	S2329	US-PGPUB; USPAT	OR	ON	2019/05/24 15:26

S2331	55,310	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:28
S2332	55,310	S2331	US-PGPUB; USPAT	OR	ON	2019/05/24 15:28
S2333	94,800	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:28
S2334	94,800	S2333	US-PGPUB; USPAT	OR	ON	2019/05/24 15:28
S2335	98,391	(scene config$6 zone network$4 snap$shot map$3 group$5 $6zone scene configu$8 set$4up snap$3shot cad) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2336	98,391	S2335	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2337	125,119	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic $6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2338	125,119	S2337	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2339	125,102	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2340	125,102	S2339	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2341	331	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/05/24 15:46
S2342	331	S2341	US-PGPUB; USPAT	OR	ON	2019/05/24 15:46

S2343	33,559	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2344	33,559	S2343	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2345	2,451	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2346	2,451	S2345	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2347	2,789	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2348	2,789	S2347	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2349	77	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2350	77	S2349	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2351	20	S2341 and S2343	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2352	20	S2351	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2353	55,310	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47

		transducer loud$5speaker playback near2 device).ab,clm.				
S2354	55,310	S2353	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2355	139,176	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2356	139,176	S2355	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2357	55,310	S2353	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2358	139,176	S2355	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2359	37,640	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2360	37,640	S2359	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2361	98,810	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59

		H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2362	158,664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00

		OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2363	158,664	S2362	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00

S2364	155,701	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00
S2365	155,701	S2364	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00
S2366	155,701	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2367	155,701	S2366	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2368	0	"s21773"	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2369	158,664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2370	158,664	S2369	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2371	296,203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2372	296,203	S2371	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

S2373	158,664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2374	158,664	S2373	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2375	296,203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR				

		H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2376	296,203	S2375	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2377	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2378	9,224	S2377	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2379	5,111	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2380	5,111	S2379	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13

S2381	62,969	"381".clas. 704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2382	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2383	98,810	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2384	158,664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2385	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2386	296,203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2387	465,927	S2361 S2362 S2364 S2366 S2369 S2371 S2373 S2375 S2377 S2379 S2382 S2383 S2384 S2385 S2386	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2388	465,927	S2387	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2389	59,458	("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2390	3,191	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2387 and S2389	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2391	3,191	S2390	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2392	37,671	S2387 and S2389	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14

S2393	37,671	S2392	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2394	321,605	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2395	321,605	S2394	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2396	62,969	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2397	41,182	S2387 and S2396	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2398	41,182	S2397	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2399	64,301	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2400	64,301	S2399	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2401	86,839	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2402	0	S2401 with volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2403	0	S2402	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2404	0	S2401 with volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2405	0	S2404	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18

S2406	0	S2402	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2407	86,839	S2401	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2408	0	S2402	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2409	7,166	S2401 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2410	7,166	S2409	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2411	956	S2401 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2412	956	S2411	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2413	2,532	S2409 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2414	2,532	S2413	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2415	289	S2411 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:22
S2416	289	S2415	US-PGPUB; USPAT	OR	ON	2019/05/24 16:22
S2417	89	S2411 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:22
S2418	89	S2417	US-PGPUB; USPAT	OR	ON	2019/05/24 16:22
S2419	87,595	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31

		H04S7/30).CPC. OR (700/94 381/119 715/1716).CCLS.)				
S2420	7,324	S2419 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2421	7,324	S2420	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2422	1,000	S2419 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2423	1,000	S2422	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2424	815,239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2425	218,212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2426	26,224	S2424 and S2425	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2427	26,224	S2426	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2428	17,650	S2419 and (gain level amplitude volume).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:32
S2429	865	S2424 and S2425 and S2428	US-PGPUB; USPAT	OR	ON	2019/05/24 16:32
S2430	9	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/05/24 16:34
S2431	0	S2429 and S2430	US-PGPUB; USPAT	OR	ON	2019/05/24 16:34
S2432	1	"Term Removed" and kallai	US-PGPUB; USPAT	OR	ON	2019/05/24 16:40
S2433	72,915	700/94.ccls. "381".clas. ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR	US-PGPUB; USPAT	OR	ON	2019/05/24 16:40

		H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)				
S2434	1,996,633	(output pair$5 channel surround$4) with (zone scene snapshot config$8)".clm,ab.125" and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:41
S2435	17,559	"177" and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:41
S2436	815,392	45and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:42
S2437	19,206	S2353 and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:42
S2438	865	S2429 and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:42
S2439	766	S2438 and S2433	US-PGPUB; USPAT	OR	ON	2019/05/24 16:43
S2440	1,983	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:44
S2441	24	S2438 and S2440	US-PGPUB; USPAT	OR	ON	2019/05/24 16:44
S2442	302,338	(song media content audio sound) same (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:45
S2443	228	S2438 and S2442	US-PGPUB; USPAT	OR	ON	2019/05/24 16:45
S2444	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2445	88,051	(700/94 381/119).ccls. ((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53

S2446	36	S2445 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2447	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2448	0	S2446 and S2447	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2449	0	S2448	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2450	13	"Term Removed"	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2451	1	"Term Removed" and kallai	US-PGPUB; USPAT	OR	ON	2019/06/06 17:53
S2452	27	S2445 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728" and group$6	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2453	27	S2452	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2454	3,016	"s2305"	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2455	71,174	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2456	71,174	S2455	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2457	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2458	19	S2457	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00

S2459	99,184	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2460	159,102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2461	156,069	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2462	156,069	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2463	159,102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2464	297,417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR				

		G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				

S2465	159,102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2466	297,417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2467	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2468	5,115	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2469	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2470	99,184	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2471	159,102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2472	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2473	297,417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR				

		H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2474	467,389	S2459 S2460 S2461 S2462 S2463 S2464 S2465 S2466 S2467 S2468 S2469 S2470 S2471 S2472 S2473	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2475	382,391	S2474 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2476	18,971	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2474	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2477	16,835	S2475 and S2476	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2478	320	S2477 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2481	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2482	9,224	S2481	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2483	156,141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48

		G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2484	5,119	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2485	315	S2484 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2486	13,578	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2487	1,761	(S2483 S2485) and S2486	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2488	14,957	S2487 "s87"	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2489	159,217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR				

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2490	6,856	S2489 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2491	6,856	S2490	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2492	156,141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2493	6,234	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2494	2,407	second near3 play$5 near4 (media song title) and S2492	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2495	581	S2493 and S2494	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48

S2496	15,307	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/06/06 19:51
S2497	500	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (S2484 S2485)	US-PGPUB; USPAT	OR	ON	2019/06/06 19:54
S2498	1,049	S2495 S2497	US-PGPUB; USPAT	OR	ON	2019/06/06 19:57
S2499	32	S2495 and S2497	US-PGPUB; USPAT	OR	ON	2019/06/06 19:57
S2500	99,266	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2501	159,217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2502	156,141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2503	156,141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2504	159,217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2505	297,684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87				

		OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2506	159,217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2507	297,684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR				

		G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2508	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

S2509	5,119	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2510	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2511	99,266	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2512	159,217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR				

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2513	9,224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2514	297,684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR				

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2515	467,719	S2500 S2501 S2502 S2503 S2504 S2505 S2506 S2507 S2508 S2509 S2510 S2511 S2512 S2513 S2514	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2516	382,706	S2515 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2517	18,990	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2515	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2518	16,854	S2516 and S2517	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2519	3,057	S2518 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2520	1,106	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)				
S2521	90	S2519 and S2520	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2522	55,979	($6zone scene configu$8 set$4up snap$3shot cad config$8 schem$3) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:06
S2523	159	("2005/0131558").URPN.	USPAT	OR	ON	2019/06/06 20:11
S2524	9	("20030004724" | "20030198254" | "20030198255" | "20040205204" | "20050131558" | "20050254662" | "20060002681" | "20060013407" | "20080155616").PN.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:18
S2525	112	("2006/0002681").URPN.	USPAT	OR	ON	2019/06/06 20:19
S2526	7,458	(output pair$5 channel surround$4) with (set$6 config$8 map$5 group$6 scene zone schem$2).clm,ab. and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/06/06 20:21
S2527	1,394	(output pair$5 channel surround$4) with (set$6 config$8 map$5 group$6 scene zone schem$2).clm,ab. and (play$5 network$6) near3 (device $6speak$6) same (sync synch$3 synchroni$9).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:22
S2533	1	"20190014413"	US-PGPUB; USPAT	OR	ON	2019/06/07 08:31
S2534	200	("20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060045281" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"20060193454" | "20060193482" | "20060199538" | "20060205349" | "20060222186" | "20060227985" | "20060229752" | "20060259649" | "20060270395" | "20060294569" | "20070003067" | "20070003075" | "20070022207" | "20070038999" | "20070043847" | "20070047712" | "20070048713" | "20070054680" | "20070071255" | "20070087686" | "20070142022" | "20070142944" | "20070143493" | "20070169115" | "20070180137" | "20070189544" | "20070192156" | "20070206829" | "20070223725" | "20070249295" | "20070265031" | "20070271388" | "20070288610" | "20070299778" | "20080002836" | "20080007649" | "20080007650" | "20080007651" | "20080018785" | "20080022320" | "20080025535" | "20080045140" | "20080065232" | "20080066094" | "20080066120" | "20080072816" | "20080075295" | "20080077261" | "20080077619" | "20080077620" | "20080086318" | "20080091771" | "20080092204" | "20080120429" | "20080126943" | "20080144861" | "20080144864" | "20080146289" | "20080152165" | "20080159545" | "20080162668" | "20080189272" | "20080205070" | "20080212786" | "20080215169" | "20080242222" | "20080247554" | "20080263010" | "20080303947" | "20090011798" | "20090017868" | "20090031336" | "20090060219" | "20090070434" | "20090089327" | "20090097672" | "20090100189" | "20090124289" | "20090157905" | "20090164655" | "20090169030" | "20090180632" | "20090193345" | "20090222115" | "20090228919" | "20090232326" | "20090251604" | "20100004983" | "20100010651" | "20100031366" | "20100049835" | "20100052843" | "20100067716" | "20100087089" | "20100142735" | "20100153097" | "20100228740" | "20100272270" | "20100284389" | "20100290643" | "20100299639" | "20110001632" | "20110002487" | "20110044476" | "20110066943" | "20110110533" |			

		"20110170710" | "20110228944" | "20110299696" | "20110316768" | "20120029671" | "20120030366" | "20120047435" | "20120051558" | "20120051567" | "20120060046" | "20120127831" | "20120129446" | "20120148075" | "20120185771" | "20120192071" | "20120207290" | "20120237054" | "20120263325" | "20120281058" | "20120290621" | "20130010970" | "20130018960" | "20130028443" | "20130031475" | "20130038726" | "20130041954" | "20130047084" | "20130051572" | "20130052940" | "20130070093" | "20130080599" | "20130094670" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "20130236029" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786" | "20140016802").PN.				
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		"20150304288" | "20150365987" | "20170188152" | "3956591" | "4105974" | "4296278" | "4306114" | "4382158" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4816989" | "4824059" | "4845751" | "4994908" | "4995778" | "5086385" | "5151922" | "5153579" | "5182552" | "5185680" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5519641" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5640388" | "5652749" | "5661665" | "5668884" | "5673323" | "5696896" | "5726989" | "5740235" | "5742623" | "5751819" | "5761320" | "5774016" | "5787249" | "5790543" | "5808662" | "5812201" | "5815689" | "5818948" | "5832024" | "5848152" | "5852722" | "5867691" | "5875233" | "5875354" | "5887143" | "5905768" | "5910991" | "5923869" | "5923902" | "5946343" | "5956025" | "5956088" | "5960006" | "5984512" | "5987611" | "5990884" | "5991307" | "5999906" | "6009457" | "6018376" | "6026150" | "6029196" | "6031818" | "6032202" | "6038614" | "6046550" | "6061457" | "6078725" | "6081266" | "6088063" | "6101195" | "6108485" | "6108686" | "6122668" | "6127941" | "6128318" | "6148205" | "6157957" | "6163647" | "6169725" | "6175872" | "6181383" | "6185737" | "6195435" | "6195436" | "6199169" | "6212282" | "6246701" | "6253293" | "6255961" | "6256554" | "6269406" | "6301012" | "6308207" | "6310652" | "6313879" | "6321252" | "6324586" | "6332147" | "6343028" | "6349285" | "6349339" | "6351821" | "6353172" | "6356871" | "6404811" | "6418150" | "6430353" | "6442443" | "6449642" | "6449653" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6522886" | "6526325" | "6535121" | "6587127" | "6598172" | "6604023" | "6611537" | "6631410" | "6636269" | "6653899" | "6654720" | "6654956" | "6658091" | "6674803" |			

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		"7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8229125" | "8230099" | "8233029" | "8233632" | "8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" |			

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S2538	200	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" | "20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" | "20030020763" | "20030023741" | "20030031333" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030055892" | "20030061428" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030091322" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030110329" | "20030126211" | "20030135822" | "20030157951" | "20030161479" | "20030167335" | "20030172123" | "20030177889" | "20030179780" | "20030185400" | "20030195964" | "20030198254" | "20030198255" | "20030198257" | "20030200001" | "20030204273" | "20030204509" | "20030210796" | "20030212802" | "20030219007" | "20030227478" | "20030229900" | "20030231208" | "20030231871" | "20030235304" | "20040001106" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040012620" | "20040014426" | "20040015252" | "20040019497" | "20040019807" | "20040019911" | "20040023697" | "20040024478" | "20040024925" | "20040027166" | "20040032348" | "20040032421" | "20040037433" |			

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S2539	76,016	(700/94.ccls. 715/716.ccls. "381".clas.) ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/07 08:33
S2540	391	S2539 and (S2534 S2535 S2536 S2537 S2538)	US-PGPUB; USPAT	OR	ON	2019/06/07 08:33
S2541	140	("5361381").URPN.	USPAT	OR	ON	2019/06/07 08:35
S2542	119	("6430353").URPN.	USPAT	OR	ON	2019/06/07 08:38

S2543	136	("6466832").URPN.	USPAT	OR	ON	2019/06/07 08:43
S2562	2,056	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 16:56
S2563	8,825	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2019/08/30 16:56
S2564	1,489	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2563	US-PGPUB; USPAT	OR	ON	2019/08/30 16:56
S2565	6,399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 16:56
S2566	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574	US-PGPUB; USPAT	OR	ON	2019/08/30 16:57

		OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2567	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 16:57
S2568	5,861	S2566 and S2567	US-PGPUB; USPAT	OR	ON	2019/08/30 16:57

S2569	123	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and S2568	US-PGPUB; USPAT	OR	ON	2019/08/30 16:57
S2570	32	("2016/0070526").URPN.	USPAT	OR	ON	2019/08/30 16:58
S2571	13	("20020141599" | "20030005462" | "20040068744" | "20050282582" | "20070250845" | "20070256113" | "20080134278" | "20080196066" | "20080219223" | "20100058407" | "6678362").PN. OR ("8528026").URPN.	US-PGPUB; USPAT	OR	ON	2019/08/30 16:59
S2572	12	("8275307").URPN.	USPAT	OR	ON	2019/08/30 17:00
S2573	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:00
S2574	6,399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:00
S2575	2,462	second near3 play$5 near4 (media song title) and S2573	US-PGPUB; USPAT	OR	ON	2019/08/30 17:00
S2576	605	S2574 and S2575	US-PGPUB; USPAT	OR	ON	2019/08/30 17:00

S2577	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2578	5,219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2579	316	S2578 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2580	14,184	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2581	1,846	(S2577 S2579) and S2580	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2582	1,156	(scene config$8 zone) same play$4 and S2581	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2583	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/08/30 17:03
S2584	102,126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2585	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR				

		H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2586	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2587	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2588	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2589	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR				

		G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2590	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR				

		H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2591	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR				

		H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2592	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2593	5,219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2594	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2595	102,126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2596	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR				

		H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2597	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2598	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR				

		G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2599	461,851	S2584 S2585 S2586 S2587 S2588 S2589 S2590 S2591 S2592 S2593 S2594 S2595 S2596 S2597 S2598	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2600	377,992	S2599 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2601	19,068	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2599	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2602	16,949	S2600 and S2601	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2603	3,143	S2602 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2604	1,106	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2605	90	S2603 and S2604	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2606	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:12
S2607	102,126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2608	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR				

		G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2609	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2610	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2611	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2612	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR				

		G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2613	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR			

		H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2614	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR				

		H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2615	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2616	5,219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2617	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2618	102,126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2619	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				

S2620	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2621	289,022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR				

		G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2622	461,851	S2607 S2608 S2609 S2610 S2611 S2612 S2613 S2614 S2615 S2616 S2617 S2618 S2619 S2620 S2621	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2623	377,992	S2622 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2624	19,068	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2622	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2625	16,949	S2623 and S2624	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2626	331	S2625 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2627	5,219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2628	316	S2627 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2629	159,080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16

		G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2630	6,399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2631	2,462	second near3 play$5 near4 (media song title) and S2629	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2632	605	S2630 and S2631	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2633	519	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (S2627 S2628)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2634	33	S2632 and S2633	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2635	5,219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2636	316	S2635 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2637	23,996	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2638	77	S2637 and (S2635 S2636)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2639	8	("20090012995" | "20110085674" | "20110295446" | "20120130580" | "20150105934" | "6226336" | "7983811" | "8457323").PN. OR ("10397516").URPN.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:19
S2640	10	("2009/0012995").URPN.	USPAT	OR	ON	2019/08/30 17:21
S2641	2,056	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:22

S2642	7,558	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:22
S2643	162,694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24

		G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2644	9,226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2645	5,861	S2643 and S2644	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2646	2,769	(output pair$5 channel surround$4 lfe) same config$8 and S2645	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2647	2,769	S2646	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2648	79	S2646 and S2642	US-PGPUB; USPAT	OR	ON	2019/08/30 17:26
S2649	207	("20020003548" | "20020124097" | "20050181348" | "20060095516" | "5808662" | "6757517" | "7218708" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27

		"7293060" | "7668990" | "7669219").PN. OR ("8290603").URPN.				
S2650	840,907	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2651	222,192	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2652	3,555	S2650 and S2651 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2653	1,081	S2652 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2654	133	("2006/0095516").URPN.	USPAT	OR	ON	2019/08/30 17:28
S2655	0	"Term Removed" and lamborne	USPAT	OR	ON	2019/08/30 17:33
S2656	0	"Term Removed" and lambourne	USPAT	OR	ON	2019/08/30 17:33
S2657	0	"Term Removed" and sonos	USPAT	OR	ON	2019/08/30 17:33
S2658	9	"Term Removed"	USPAT	OR	ON	2019/08/30 17:33
S2659	1	"Term Removed" and lambourne	US-PGPUB; USPAT	OR	ON	2019/08/30 17:34
S2660	82,828	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:34
S2661	1	"Term Removed" and lambourne	US-PGPUB; USPAT	OR	ON	2019/08/30 17:38
S2662	82,828	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:38

S2663	10,308	S2662 and S2650	US-PGPUB; USPAT	OR	ON	2019/08/30 17:39
S2664	831	S2662 and S2650 and S2624	US-PGPUB; USPAT	OR	ON	2019/08/30 17:39
S2665	6	("2013/0096926").URPN.	USPAT	OR	ON	2019/08/30 17:42
S2666	200	("20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060045281" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" | "20060193454" | "20060193482" | "20060199538" | "20060205349" | "20060222186" | "20060227985" | "20060229752" | "20060259649" | "20060270395" | "20060294569" | "20070003067" | "20070003075" | "20070022207" | "20070038999" | "20070043847" | "20070047712" | "20070048713" | "20070054680" | "20070071255" | "20070087686" | "20070142022" | "20070142944" | "20070143493" | "20070169115" | "20070180137" | "20070189544" | "20070192156" | "20070206829" | "20070223725" | "20070249295" | "20070265031" | "20070271388" | "20070288610" | "20070299778" | "20080002836" | "20080007649" | "20080007650" | "20080007651" | "20080018785" | "20080022320" | "20080025535" | "20080045140" | "20080065232" | "20080066094" | "20080066120" | "20080072816" | "20080075295" | "20080077261" | "20080077619" | "20080077620" | "20080086318" | "20080091771" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

		"20080092204" | "20080120429" | "20080126943" | "20080144861" | "20080144864" | "20080146289" | "20080152165" | "20080159545" | "20080162668" | "20080189272" | "20080205070" | "20080212786" | "20080215169" | "20080242222" | "20080247554" | "20080263010" | "20080291863" | "20080303947" | "20090011798" | "20090017868" | "20090031336" | "20090060219" | "20090070434" | "20090089327" | "20090097672" | "20090100189" | "20090124289" | "20090157905" | "20090164655" | "20090169030" | "20090180632" | "20090193345" | "20090222115" | "20090228919" | "20090232326" | "20090251604" | "20100004983" | "20100010651" | "20100031366" | "20100049835" | "20100052843" | "20100067716" | "20100087089" | "20100142735" | "20100153097" | "20100228740" | "20100272270" | "20100284389" | "20100290643" | "20100299639" | "20110001632" | "20110002487" | "20110044476" | "20110066943" | "20110110533" | "20110170710" | "20110228944" | "20110299696" | "20110316768" | "20120029671" | "20120030366" | "20120047435" | "20120051558" | "20120051567" | "20120060046" | "20120127831" | "20120129446" | "20120148075" | "20120185771" | "20120192071" | "20120207290" | "20120237054" | "20120263325" | "20120281058" | "20120290621" | "20130010970" | "20130018960" | "20130028443" | "20130031475" | "20130038726" | "20130041954" | "20130047084" | "20130051572" | "20130052940" | "20130070093" | "20130080599" | "20130094670" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "20130236029" | "20130243199" | "20130253679" | "20130253934" |			

		"20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786").PN.				
S2667	261	("20140016802" | "20140023196" | "20140037097" | "20140064501" | "20140075308" | "20140075311" | "20140079242" | "20140108929" | "20140112481" | "20140123005" | "20140140530" | "20140161265" | "20140181569" | "20140219456" | "20140226823" | "20140242913" | "20140256260" | "20140267148" | "20140270202" | "20140273859" | "20140279889" | "20140285313" | "20140286496" | "20140294200" | "20140298174" | "20140323036" | "20140344689" | "20140355768" | "20140355794" | "20140378056" | "20150019670" | "20150026613" | "20150032844" | "20150043736" | "20150049248" | "20150063610" | "20150074527" | "20150074528" | "20150098576" | "20150139210" | "20150146886" | "20150201274" | "20150256954" | "20150281866" | "20150286360" | "20150304288" | "20150365987" | "20170188152" | "3956591" | "4105974" | "4296278" | "4306114" | "4382158" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4816989" | "4824059" | "4845751" | "4994908" | "4995778" | "5086385" | "5151922" | "5153579" | "5182552" | "5185680" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5519641" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5640388" | "5652749" | "5661665" | "5668884" | "5673323" | "5696896" | "5726989" | "5740235" | "5742623" | "5751819" | "5761320" | "5774016" | "5787249" | "5790543" | "5808662" | "5812201" | "5815689" | "5818948" | "5832024" | "5848152" | "5852722" | "5867691" | "5875233" | "5875354" | "5887143" | "5905768" | "5910991" | "5923869" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

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S2672	1,036	S2666 S2667 S2668 S2669 S2670 S2671	US-PGPUB; USPAT	OR	ON	2019/08/30 17:44
S2673	202	S2672 and S2662	US-PGPUB; USPAT	OR	ON	2019/08/30 17:44
S2674	24	S2664 and S2673	US-PGPUB; USPAT	OR	ON	2019/08/30 17:44
S2675	1,009	S2664 S2673	US-PGPUB; USPAT	OR	ON	2019/08/30 17:44
S2676	519	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (S2627 S2628)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:46
S2677	5	S2675 and S2676	US-PGPUB; USPAT	OR	ON	2019/08/30 17:46
S2678	1	("2016/0196851").URPN.	USPAT	OR	ON	2019/08/30 17:47
S2679	14	("2015/0092947").URPN.	USPAT	OR	ON	2019/08/30 17:48
S2680	21	("20070223725" | "20080008338" | "20090079883" | "20100260348" | "20100299639" | "20110026717" | "20120058727" | "20130089217" | "20130331970" | "20130336504" | "20140057569" | "20140079256" | "20140219484" | "20140337426" | "20150055781" | "20150092947" | "7483538" | "8554133" | "8788080" | "8873767" | "9715365").PN. OR ("10284934").URPN.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:49
S2681	339	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/08/30 17:51

S2682	361	automat$6 near6 channel near3 (config$8 zone scene snapshot area set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	2019/08/30 17:51
S2683	20	("20040261099" | "20050195998" | "20060174312" | "20070094691" | "20080109207" | "20090216706" | "20100060549" | "20100265397" | "20160037189" | "20160080445" | "20160196851" | "5610653" | "6337716" | "6446261" | "8594743" | "9094564" | "9338391" | "9396182" | "9398322" | "9542490").PN. OR ("10362346").URPN.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:59
S2685	17	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:12
S2686	10	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and S2685	US-PGPUB; USPAT	OR	ON	2019/10/14 09:12
S2687	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:14

		H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				

S2688	1,375	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2687	US-PGPUB; USPAT	OR	ON	2019/10/14 09:14
S2689	1,375	S2688	US-PGPUB; USPAT	OR	ON	2019/10/14 09:14
S2690	2,104	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:15
S2691	2,104	S2690	US-PGPUB; USPAT	OR	ON	2019/10/14 09:15
S2692	2,054	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	2019/10/14 09:18
S2693	2,001	S2692 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:18
S2694	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:22
S2695	2,966	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/10/14 09:22
S2696	160,421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26

		H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2697	2,489	second near3 play$5 near4 (media song title) and S2696	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2698	2,489	S2697	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2699	2,104	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2700	2,104	S2699	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2701	17	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2702	17	S2701	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2703	24,444	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	2019/10/14 09:28
S2704	24,444	S2703	US-PGPUB; USPAT	OR	ON	2019/10/14 09:28
S2705	6,507	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:28
S2706	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:28
S2707	160,421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30

		G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2708	6,507	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2709	2,489	second near3 play$5 near4 (media song title) and S2707	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2710	619	S2708 and S2709	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2711	5,245	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2712	316	S2711 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2713	6	S2712 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30
S2714	103,467	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2715	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR				

		H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2716	160,421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2717	160,421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2718	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2719	292,947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR				

		G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2720	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2721	292,947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR				

		H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2722	9,229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2723	5,245	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2724	9,229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2725	103,467	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2726	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2727	9,229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

S2728	292,947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR				

		H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)				
S2729	466,723	S2714 S2715 S2716 S2717 S2718 S2719 S2720 S2721 S2722 S2723 S2724 S2725 S2726 S2727 S2728	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2730	63,006	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2731	41,223	S2729 and S2730	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2732	164,309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33

		OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2733	8,139	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2732	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2734	26,466	(zone scene config$9) with play$4 and S2732	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2735	2,924	S2733 and S2734	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33

S2736	2,926	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2732	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2737	2,926	S2736	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2738	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:37
S2739	1,375	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2687	US-PGPUB; USPAT	OR	ON	2019/10/14 09:37
S2740	4	"Term Removed" and clock$4	US-PGPUB; USPAT	OR	ON	2019/10/14 09:40
S2741	2	"20160357504"	US-PGPUB; USPAT	OR	ON	2019/10/14 09:41
S2776	32	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2020/07/23 18:15
S2777	32	S2776	US-PGPUB; USPAT	OR	ON	2020/07/23 18:15
S2778	176,636	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR	US-PGPUB; USPAT	OR	ON	2020/07/23 18:15

		G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR				

		G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				
S2779	1,558	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and S2778	US-PGPUB; USPAT	OR	ON	2020/07/23 18:15
S2780	1,558	S2779	US-PGPUB; USPAT	OR	ON	2020/07/23 18:15
S2781	81,279	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2020/07/23 18:17
S2782	86,202	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2020/07/23 18:17
S2783	104,832	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker speaker transducer)	US-PGPUB; USPAT	OR	ON	2020/07/23 18:17
S2788	95,037	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 11:30
S2789	758	((G11B27/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 11:30
S2790	2,798	((H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 11:30
S2791	4,967	((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 11:30
S2796	5,979,395	($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 12:10
S2797	95,037	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2798	758	((G11B27/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12

S2799	2,798	((H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2800	4,967	((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2801	101,618	S2797 S2798 S2799 S2800	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2802	5,979,395	($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2803	51,177	S2796 and S2797	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2804	389	S2796 and S2798	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2805	1,644	S2796 and S2799	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2806	2,752	S2796 and S2800	US-PGPUB; USPAT	OR	ON	2020/08/17 12:12
S2807	1,068	S2796 and S2797 and (S2798 S2799 S2800)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:13
S2808	96	S2796 and S2798 and (S2797 S2799 S2800)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:13
S2809	309	S2796 and S2799 and (S2797 S2798 S2800)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:13
S2810	984	S2796 and S2800 and (S2797 S2798 S2799)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:13
S2811	105,698	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker speaker transducer)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:14
S2812	105,698	S2811	US-PGPUB; USPAT	OR	ON	2020/08/17 12:14
S2813	718	S2811 and (S2807 S2808 S2809 S2810)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:15

S2814	32	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:15
S2815	32	S2814	US-PGPUB; USPAT	OR	ON	2020/08/17 12:15
S2816	18	S2811 and S2814	US-PGPUB; USPAT	OR	ON	2020/08/17 12:19
S2817	336,767	(scene config$6 zone network$4 snapshot pref preferenc$4) with play$4 play$5 with (sync synchron$8)	US-PGPUB; USPAT	OR	ON	2020/08/17 12:21
S2818	21,360	S2811 and S2817	US-PGPUB; USPAT	OR	ON	2020/08/17 12:22
S2819	3,603	S2811 and S2817 and S2801	US-PGPUB; USPAT	OR	ON	2020/08/17 12:22
S2820	71,488	((scene config$6 zone network$4 snapshot pref preferenc$4) with play$4 play$5 with (sync synchron$4)).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 12:23
S2821	10,956	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker speaker transducer).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/08/17 12:23
S2822	2,214	S2820 and S2821	US-PGPUB; USPAT	OR	ON	2020/08/17 12:24
S2823	824	(S2803 S2804 S2805 S2806) and S2821	US-PGPUB; USPAT	OR	ON	2020/08/17 12:25
S2824	1,272	S2813 S2823	US-PGPUB; USPAT	OR	ON	2020/08/17 12:25
S2826	0	("2016/0021457").URPN.	USPAT	OR	ON	2020/08/17 13:02
S2827	3	("2015/0319288").URPN.	USPAT	OR	ON	2020/08/17 13:06
S2830	0	(G06F16/27).ccls.	US-PGPUB; USPAT	OR	ON	2020/08/17 13:12
S2831	95,037	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 13:13

S2832	758	((G11B27/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 13:13
S2833	2,798	((H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 13:13
S2834	4,967	((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008).CPC.)	US-PGPUB; USPAT	OR	ON	2020/08/17 13:13
S2835	101,618	S2831 S2832 S2833 S2834	US-PGPUB; USPAT	OR	ON	2020/08/17 13:13
S2845	3	("20170316803" "9955281" "20180217804").pn.	US-PGPUB; USPAT	OR	ON	2020/12/15 11:37
S2846	6,089,776	($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2847	99,920	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2848	756	((G11B27/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2849	2,917	((H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2850	5,176	((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2851	53,821	S2846 and S2847	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2852	388	S2846 and S2848	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2853	1,707	S2846 and S2849	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2854	2,876	S2846 and S2850	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2855	1,137	S2846 and S2847 and (S2848 S2849 S2850)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40

S2856	90	S2846 and S2848 and (S2847 S2849 S2850)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2857	336	S2846 and S2849 and (S2847 S2848 S2850)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2858	1,050	S2846 and S2850 and (S2847 S2848 S2849)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2859	110,488	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker speaker transducer)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2860	761	S2859 and (S2855 S2856 S2857 S2858)	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2861	11,301	(digital wireless network$6 smart intelligen$6) near3 (playback adj device $6speaker speaker transducer).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2862	872	(S2851 S2852 S2853 S2854) and S2861	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2863	287	S2860 AND S2862	US-PGPUB; USPAT	OR	ON	2020/12/15 11:40
S2864	73,328	((scene config$6 zone network$4 snapshot pref preferenc$4) with play$4 play$5 with (sync synchron$4)).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:06
S2865	2,315	S2864 and S2861	US-PGPUB; USPAT	OR	ON	2020/12/15 12:06
S2866	20,579	"Term Removed" volume.ti.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:12
S2867	1	"Term Removed" and volume.ti.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:12
S2868	0	"Term Removed" and radi$4	US-PGPUB; USPAT	OR	ON	2020/12/15 12:15
S2869	4	("20150169076" "20150301592" "10285006" "9609383").pn. and radi$4	US-PGPUB; USPAT	OR	ON	2020/12/15 12:15
S2870	83,113	((G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:17

S2871	2,917	((H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:17
S2872	5,176	((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008).CPC.)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2873	1,410	S2870 and (S2872 S2872)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2874	1,626	S2870 and (S2871 S2872)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2875	101	S2870 and (S2871 and S2872)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2876	513	S2871 and (S2870 S2872)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2877	1,606	S2872 and (S2870 S2871)	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2878	1,822	S2874 S2876 S2877	US-PGPUB; USPAT	OR	ON	2020/12/15 12:18
S2879	6,089,776	($4group$4 set subset fader adjust$5 operator).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:19
S2880	4	("20150169076" "20150301592" "10285006" "9609383").pn.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:19
S2881	12	("20170316803" "9955281" "20180217804")	US-PGPUB; USPAT	OR	ON	2020/12/15 12:38
S2882	1	("20150055799" "2016009824").pn.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:51
S2883	0	("2015055799" "2016009824").pn.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:52
S2884	2	("20150055799" "20160098247").pn.	US-PGPUB; USPAT	OR	ON	2020/12/15 12:53
S2885	23	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input	US-PGPUB; USPAT	OR	ON	2020/12/16 10:20

		input$4)) near5 (smart intelligent sens$6 determin$6)				
S2886	2	"20150055799" and (extern$4 exteri$4) with clock$4	US-PGPUB; USPAT	OR	ON	2020/12/16 11:16
S2887	73,328	((scene config$6 zone network$4 snapshot pref preferenc$4) with play$4 play$5 with (sync synchron$4)).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/12/16 11:19
S2888	73,328	S2887	US-PGPUB; USPAT	OR	ON	2020/12/16 11:19
S2889	31,428	((scene config$6 zone network$4 snapshot pref preferenc$4) and play$5 with (sync synchron$4))	US-PGPUB; USPAT	OR	ON	2020/12/16 11:19
S2890	519	((scene config$6 zone network$4 snapshot pref preferenc$4) and play$5 with (sync synchron$4)) and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2020/12/16 11:19
S2891	38,187	re$3sampl$4	US-PGPUB; USPAT	OR	ON	2020/12/17 11:29
S2892	0	re$3sampl$4 and sonos.as.	US-PGPUB; USPAT	OR	ON	2020/12/17 11:57
S2893	12	(decima$6 interpol$6) and sonos.as.	US-PGPUB; USPAT	OR	ON	2020/12/17 11:58
S2894	22	(subsequen$5 addition$4 plural$5 second) near3 audio near3 stream$4 with (mic mike microphone input$4) same (align$5 sync synchron$6) same (pts tag$4 stamp$4 time$3stamp$4)	US-PGPUB; USPAT	OR	ON	2020/12/17 12:23
S2895	1	(subsequen$5 addition$4 plural$5 second) near3 audio near3 stream$4 with (mic mike microphone input$4) same (align$5 sync synchron$6) same (pts tag$4 stamp$4 time$3stamp$4) and re$3sampl$4	US-PGPUB; USPAT	OR	ON	2020/12/17 12:30
S2896	1	(decima$6 interpol$6) and S2894	US-PGPUB; USPAT	OR	ON	2020/12/17 12:30
S2897	1	S2895 S2896	US-PGPUB; USPAT	OR	ON	2020/12/17 12:34
S2898	174	(subsequen$5 addition$4 plural$5 second) near3 audio near3 stream$4 with (mic mike microphone input$4) and	US-PGPUB; USPAT	OR	ON	2020/12/17 13:07

		(align$5 sync synchron$6) same (pts tag$4 stamp$4 time$3stamp$4)				
S2899	2	("20150055799" "20160098247").pn.	US-PGPUB; USPAT	OR	ON	2020/12/17 13:07
S2900	0	"Term Removed" and delivering.ti.	US-PGPUB; USPAT	OR	ON	2020/12/17 16:28
S2901	1	"Term Removed" and deliver$4	US-PGPUB; USPAT	OR	ON	2020/12/17 16:29
S2902	12	mccord.xa,xp. and preset$5.clm.	US-PGPUB; USPAT	OR	ON	2020/12/18 16:31

1/7/2021 3:31:31 PM
C:\Users\pmccord\Documents\EAST\Workspaces\kallai_sonos_stereo_config_ix.wsp

PE2E SEARCH - Search History (Prior Art)

There are no Prior Art searches to show.

PE2E SEARCH - Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
N91	650	g06f17/30772.cpc.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:08 PM
N92	151	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:09 PM
N93	116463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:15 PM

		G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR				

		G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR				

		H04R25/554 OR H04R3/04).CPC.)					
N94	83800	N93 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:25 PM
N95	5669	N93 and ($6zone scene configu$8) and discov$6	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:28 PM
N96	2883	N93 and ($6zone scene configu$8) and discov$6 and (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:29 PM
N97	9885	N93 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:29 PM
N98	2917	N93 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:29 PM
N99	139546	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:30 PM

		H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR					

		G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR				

		H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR					

		H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N100	98841	N93 and "16"	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:30 PM
N101	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:30 PM
N102	3065	N101 and N99	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:30 PM
N103	222	N102 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:30 PM
N104	57	N102 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:31 PM
N105	54904	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:32 PM

		H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N106	3448	N101 and N105	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 12:32 PM

N110	2	"20060165184"	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:22 PM
N111	2	"20070094036"	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:24 PM
N112	116463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:26 PM

		H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR					

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N113	2883	N112 and ($6zone scene configu$8) and discov$6 and (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:26 PM
N114	1	"071286".ap. and spatial near5 parameter	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:45 PM
N115	1	"071286".ap. and second with temporary	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 01:52 PM

N116	10	"651633".ap.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:06 PM
N117	8030	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:31 PM
N118	801	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:31 PM
N119	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:31 PM
N120	637	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N112	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:32 PM
N121	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:32 PM
N122	4814	N112 and N121	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:32 PM
N123	9	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N122	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:32 PM
N124	41	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N122	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:33 PM
N125	4362	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:33 PM
N126	15	N124 and N125	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:33 PM
N127	457	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N125	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:33 PM

N128	104740	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:34 PM
N129	3019	(zone scene config$9)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16

		with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)					02:34 PM
N130	1479	second near3 play$5 near4 (media song title) and N128	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:35 PM
N131	218	N129 and N130	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 02:35 PM
N132	104740	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:51 PM

		H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N133	3019	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:51 PM
N134	1479	second near3 play$5 near4 (media song title) and N132	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:51 PM
N135	218	N133 and N134	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:51 PM
N136	116463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM

		G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162				

		OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR					

		H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N137	139546	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM

		H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR					

		G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR					

		G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N138	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM
N139	3065	N138 and N137	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM
N140	222	N139 and ($6zone scene	US-PGPUB; USPAT	OR	ON	ON	2014/05/16

		configu$8) and (speaker transducer loud$3speaker).ab.					08:52 PM
N141	116463	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM

		H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR				

		H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N142	83800	N141 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:52 PM
N143	0	"256055".ap. and the adj predetermined.clm.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:54 PM
N144	2	"256055".ap. and predetermined.clm.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:55 PM
N145	1	"256055".ap. and code.clm.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 08:56 PM

N146	1	galand.in. and varying.ti.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:03 PM
N147	5	"256055".ap. and compar$8	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:03 PM
N148	0	liljyerd.in.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:05 PM
N149	0	lilyjerd.in.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:05 PM
N150	7	liljeryd.in. and enhancement.ti.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:06 PM
N151	1	"256055".ap. and cod$4.clm.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:11 PM
N152	173	galand.in. liljeryd.in. and (modulat$5 frequency with modulat$5)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:18 PM
N153	50	(galand.in. liljeryd.in.) and (modulat$5 frequency with modulat$5)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:18 PM
N154	8	(galand.in. liljeryd.in.) and (modulat$5 frequency with modulat$5) and (varying.ti. enhancement.ti.)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:18 PM
N155	1	"256055".ap. and high adj frequency.clm.	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:27 PM
N156	8	(galand.in. liljeryd.in.) and (high adj frequency) and (varying.ti. enhancement.ti.)	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:27 PM
N157	1	"256055".ap. and high adj frequency	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:29 PM
N158	1	"256055".ap. and high adj frequency with complement$5	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:30 PM
N159	6	qmf and high adj frequency with complement$5	US-PGPUB; USPAT	OR	ON	ON	2014/05/16 09:31 PM
N163	139776	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:18 AM

		H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR					

		H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR					

		G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR				

		H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N164	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:18 AM
N165	3070	N164 and N163	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:18 AM
N166	222	N165 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:18 AM
N167	57	N165 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:18 AM
N168	801	zone with play$4 and	US-PGPUB; USPAT	OR	ON	ON	2014/05/19

		play$5 with different near3 (song media content) and (sync synchron$8)					09:18 AM
N169	2	(US-20100010651-$).did. or (US-7587254-$).did.	US-PGPUB; USPAT	OR	ON	ON	2014/05/19 09:19 AM
N173	821	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:04 AM
N174	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:05 AM
N175	106524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:05 AM

		G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N176	1530	second near3 play$5 near4 (media song title) and N175	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:05 AM
N177	821	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:05 AM
N178	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:10 AM
N179	15	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:11 AM
N180	1	"20120263318"	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:12 AM
N181	3139	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:13 AM

N182	110	N181 and 700/94	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:14 AM
N183	93	N181 and (700/94.ccls. 704/500-502.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:19 AM
N184	243	N181 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:20 AM
N185	3	N184 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:20 AM
N186	4	"8275307"	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:25 AM
N187	1452	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 11:25 AM
N198	7	("20020098878" | "20020196134" | "20060046756" | "20070127734" | "4941187" | "6181334" | "6778073").PN.	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:05 PM
N199	30	("2002/0098878").URPN.	USPAT	OR	ON	ON	2014/07/15 01:08 PM
N200	3	("8275307").URPN.	USPAT	OR	ON	ON	2014/07/15 01:14 PM
N201	3139	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:17 PM
N202	243	N201 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:17 PM
N203	243	N202 and N202	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:17 PM
N204	1452	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:17 PM
N205	1452	N204	US-PGPUB; USPAT	OR	ON	ON	2014/07/15 01:17 PM
N206	7	N203 and N204	US-PGPUB; USPAT	OR	ON	ON	2014/07/15

							01:17 PM
N236	721	g06f17/30772.cpc.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:34 PM
N237	721	N236	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:34 PM
N238	161	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:53 PM
N239	161	N238	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:53 PM
N240	107060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:54 PM

		G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR					

		G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N241	3224	N240 and ($6zone scene configu$8) and (speaker	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:54 PM

		transducer loud$3speaker).ab.					
N242	3224	N241	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:54 PM
N243	58727	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:55 PM

		OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N244	58727	N243	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:55 PM
N245	8643	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N246	8643	N245	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N247	107060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM

		G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR				

		G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR				

		H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N248	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N249	5166	N247 and N248	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N250	15	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N249	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N251	15	N250	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:56 PM
N252	5166	N249	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:57 PM
N253	154604	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:57 PM

		OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR					

		H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR				

		G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR				

		H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N254	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:57 PM
N255	3355	N254 and N253	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:57 PM
N256	3355	N255	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:57 PM
N257	107060	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:58 PM

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR				

		G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N258	107060	N257	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:58 PM
N259	78439	N257 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:59 PM
N260	78439	N259	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 01:59 PM
N261	154604	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:09 PM

		OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR					

		H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR					

		H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR					

		G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N262	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:09 PM
N263	3355	N262 and N261	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:09 PM
N264	3355	N263	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:09 PM
N265	60	N263 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:11 PM
N266	60	N265	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:11 PM
N267	110511	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:16 PM

		G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N268	1604	second near3 play$5 near4 (media song title) and N267	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:16 PM
N269	1604	N268	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:16 PM
N270	3221	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:27 PM
N271	253	N270 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:27 PM
N272	253	N271	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:27 PM
N273	253	N271	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:42 PM
N274	4	N271 and (line$3in line$3input$4 line near3	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:42 PM

		(in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N275	4	N274	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:42 PM
N276	5	700/94.ccls. and state near3 chang$3 with (audio signal output input) and $5speaker with network	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:44 PM
N277	1107880	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 02:49 PM
N278	65	N277 and N271	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:02 PM
N279	4901	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:08 PM
N280	9	(N270 N271) and N279	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:08 PM
N281	0	("2014/0324202").URPN.	USPAT	OR	ON	ON	2014/11/26 03:14 PM
N282	0	("2013/0287228").URPN.	USPAT	OR	ON	ON	2014/11/26 03:14 PM
N283	2	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:32 PM
N284	1282	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and "48"	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:32 PM
N285	1	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and N283	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:32 PM
N286	1189	(scene config$8 zone) same play$4 and N279	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:33 PM

N287	461	(N267 N271) and N279	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:34 PM
N288	252	(scene config$8 zone) same play$4 and N287	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:35 PM
N293	3221	N270	US-PGPUB; USPAT	OR	ON	ON	2014/11/26 03:45 PM
N294	107133	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:16 AM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N295	3229	N294 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:16 AM
N296	2	zone with play$4 and play$5 with different near3 (song media	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:17 AM

		content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N297	1	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and N296	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:17 AM
N298	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:18 AM
N299	5167	N294 and N298	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:19 AM
N300	1827	(output pair$5 channel surround$4) with config$8 and N299	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:19 AM
N301	86	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and N299	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:19 AM
N302	0	("2013/0178963").URPN.	USPAT	OR	ON	ON	2014/12/01 10:26 AM
N303	77	cosine near2 transform same ahmed	USPAT	OR	ON	ON	2014/12/01 10:28 AM
N304	101	cosine near2 transform same ahmed	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:28 AM
N305	60	cosine near2 transform same ahmed same natarajan	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:28 AM
N306	1	video adj codec with jain	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:28 AM
N307	1	video with codec with jain	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:29 AM
N308	448	video with codec with motion with compensation	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:29 AM
N309	0	video with codec with motion with compensation same jain	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:30 AM
N310	6	video with codec with motion with compensation	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:30 AM

		and jain					
N311	1	("2008/0243278").URPN.	USPAT	OR	ON	ON	2014/12/01 10:40 AM
N312	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:40 AM
N313	58784	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:40 AM

		H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N314	3740	N312 and N313	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:40 AM
N315	5	("2006/0149402").URPN.	USPAT	OR	ON	ON	2014/12/01 10:42 AM
N316	8	("2006/0009985").URPN.	USPAT	OR	ON	ON	2014/12/01 10:45 AM
N317	8	"256434".ap.	USPAT	OR	ON	ON	2014/12/01 10:48 AM
N318	12	"256434".ap.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:48 AM
N319	50	("20020002039" | "20020003548" | "20020072816" | "20020124097" | "20030020763" | "20030167335" | "20030177889" | "20040010727" | "20040015252" | "20040117044" |	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:51 AM

		"20040131192" | "20040223622" | "20040225389" | "20050002535" | "20050021470" | "20050131558" | "20050144284" | "20050289224" | "20060041616" | "20060149402" | "20070142022" | "20070142944" | "20070189544" | "20070288610" | "20080025535" | "20080045140" | "20080077261" | "20080144861" | "20080152165" | "5182552" | "5946343" | "6631410" | "6778869" | "7130608" | "7187947" | "7218708" | "7539551" | "7558224" | "7571014" | "7643894" | "7668990" | "7742832" | "7761176" | "7805210" | "7962482" | "8045952" | "8189824" | "8234395" | "8239559" | "8290603").PN. OR ("8788080").URPN.					
N320	7	("2008/0045140").URPN.	USPAT	OR	ON	ON	2014/12/01 10:57 AM
N321	25	("20030024375" | "20030121401" | "20030150317" | "20040154460" | "20050120865" | "20060179160" | "20070065794" | "20070293250" | "20080045140" | "20080139229" | "20080216125" | "20090168088" | "20090213032" | "20090272251" | "20100033402" | "20100041330" | "7012185" | "7091926" | "7164906" | "7297858" | "7453418" | "7483080" | "7489323" | "8044289" | "RE42565").PN.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 10:58 AM

N322	41	("2004/0223622").URPN.	USPAT	OR	ON	ON	2014/12/01 11:05 AM
N323	27	("2002/0124097").URPN.	USPAT	OR	ON	ON	2014/12/01 11:10 AM
N324	154812	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 11:12 AM

		H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR				

		G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR					

		G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N325	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 11:12 AM
N326	3356	N325 and N324	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 11:12 AM
N327	240	N326 and ($6zone scene configu$8) and (speaker	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 11:12 AM

		transducer loud$3speaker).ab.					
N328	7	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2014/12/01 11:17 AM
N377	10	(US-20080077261-$ or US-20020002039-$ or US-20100010651-$ or US-20030210796-$ or US-20080045140-$ or US-20060179160-$ or US-20040223622-$).did. or (US-7587254-$ or US-8135141-$ or US-7539551-$).did.	US-PGPUB; USPAT	OR	ON	ON	2015/02/06 05:41 PM
N378	17	(US-20070047481-$ or US-20050254505-$ or US-20090228919-$ or US-20030198257-$ or US-20130187767-$ or US-20080066094-$ or US-20100299639-$ or US-20100052843-$ or US-20080025535-$ or US-20020098878-$ or US-20050100174-$ or US-20060229752-$ or US-20100284389-$ or US-20080162668-$ or US-20060029005-$ or US-20080092204-$ or US-20050177256-$).did.	US-PGPUB; USPAT	OR	ON	ON	2015/02/06 05:41 PM
N379	19	(US-5909183-$ or US-6604023-$ or US-6587127-$ or US-8700730-$ or US-8571237-$ or US-7849181-$ or US-6889207-$ or US-7302468-$ or US-8275307-$ or US-8639370-$ or US-7966085-$ or US-8086287-$ or US-6678014-$ or US-8423893-$ or US-7987294-$ or US-7742606-$ or US-5519641-$ or US-5406634-$ or US-8189824-$).did. or (EP-1098476-$).did.	US-PGPUB; USPAT	OR	ON	ON	2015/02/06 05:41 PM

N380	36	N378 N379	US-PGPUB; USPAT	OR	ON	ON	2015/02/06 05:42 PM
N381	23	N380 and request$6	US-PGPUB; USPAT	OR	ON	ON	2015/02/06 05:42 PM
N401	0	reverberation and mccord	US-PGPUB; USPAT	OR	ON	ON	2015/02/07 10:13 AM
N402	11	"186991".ap.	US-PGPUB; USPAT	OR	ON	ON	2015/02/07 10:17 AM
N503	13	("20020098878"|"20050100174"|"20050177256"|"20060179160"|"20060205349"|"20060229752"|"20070223725"|"20080092204"|"20100010651"|"20100052843"|"5406634"|"5519641"|"6889207").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/02/24 04:04 PM
N511	3548	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 10:49 AM
N512	3548	N511	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 10:49 AM
N513	115368	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:12 AM

		G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N514	1681	second near3 play$5 near4 (media song title) and N513	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:12 AM
N515	1681	N514	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:12 AM
N516	115368	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:13 AM

		G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N517	1681	second near3 play$5 near4 (media song title) and N516	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:13 AM
N518	1681	N517	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:13 AM
N519	109073	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM

		G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR					

		G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR					

		H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N520	8708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N521	5414	N519 and N520	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N522	58	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N521	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N523	5119	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N524	18	N522 and N523	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N525	18	N524	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:16 AM
N526	3358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N527	268	N526 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM

N528	5	N527 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N529	5	N528	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N530	3358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N531	268	N530 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N532	268	N531 and N531	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N533	1666	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N534	7	N532 and N533	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:37 AM
N535	918	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:56 AM
N536	918	N535	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:56 AM
N537	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:58 AM
N538	3	N537	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 11:58 AM
N539	3	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and "s88"	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:28 PM
N540	3	N539	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:28 PM
N542	3358	((G11B27/10 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07

		H03G3/10 OR H03G3/3026).CPC.)					12:30 PM
N543	268	N542 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:30 PM
N544	18034	N542 (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:30 PM
N545	109073	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:30 PM

		G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR					

		H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N546	8708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:30 PM
N547	5414	N545 and N546	US-PGPUB; USPAT	OR	ON	ON	2015/05/07

							12:30 PM
N548	58	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N547	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:30 PM
N549	1621	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N545	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:31 PM
N550	3694	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N545	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:31 PM
N551	15779	(zone scene config$9) with play$4 and N545	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:32 PM
N552	1117	N550 and N551	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:32 PM
N553	1354	(network$6) near3 (playback adj device $6speaker transducer) and N545	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:32 PM
N554	959	(network$6) near3 ($6speaker transducer) and N545	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:32 PM
N555	156	N551 and N554	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:38 PM
N556	150	N551 and N554 not sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:55 PM
N557	5414	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:56 PM

		G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR				

		G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR					

		H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.) and N546					
N558	53	N554 and N557	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 12:56 PM
N559	3358	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 01:53 PM
N560	10	("20080159545"|"20090232326"|"20100153097"|"6487296"|"7689305"|"7804972"|"8054987"|"8233635"|"8498726"|"8588432").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 01:59 PM
N561	5	("20020143547"|"20040147224"|"20040220687"|"7346332"|"7561932").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/05/07 02:00 PM
N563	5371	h04r2227/$3.cpc. h04r2420/$4.cpc. h04s7/30.cpc. h04r2227/$3.cpc. h04r27/$3.cpc. h04r3/12.cpc.	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:31 PM
N564	304	N563 and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:31 PM
N565	273	N563 and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2015/05/08

		and (config$8 pair$6 mp4 mpeg4 mpeg$3"4")					04:31 PM
N566	273	N563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo)	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:32 PM
N567	156	N563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo) same $5speaker	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:32 PM
N568	100	N563 and 700/94.ccls. and (config$8 pair$6 joint near3 stereo) same $5speaker and network$6	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:32 PM
N569	47	N563 and 700/94.ccls. and (config$8 pair$6) and (multi$6channel surround "5.1" multi$6 near2 channel joint near3 stereo) same $5speaker and network$6	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:33 PM
N570	29	N563 and 700/94.ccls. and (config$8 pair$6) and (multi$6channel surround "5.1" multi$6 near2 channel joint near3 stereo) same $5speaker and $5speaker same network$6	US-PGPUB; USPAT	OR	ON	ON	2015/05/08 04:33 PM
N584	8	("20010046235"|"20020173273"|"20040098754"|"20050062637"|"20130022221"|"5153579"|"7206967"|"7711774").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 12:26 PM
N585	8	("20010046235"|"20020173273"|"20040098754"|"20050062637"|"20130022221"|"5153579"|"7206967"|"7711774").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 12:28 PM
N586	16	("20010042107"|"20020022453"|"20020026442"|"20030073432"|"20030157951"|"20040019497"|"20040024478"|"5602992"|"5923902"|"6404811"|"6522886"|"7130616"|"7136934"|"7143939"|"7236773"|"7657910").PN.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 12:28 PM

N587	0	makino.in. and mccord.xa.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 03:20 PM
N588	2	heavy and mccord.xa.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 03:20 PM
N589	4	makino.in. and mccord.xp.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 03:20 PM
N590	1	kenwood.as. and mccord.xp.	US-PGPUB; USPAT	OR	ON	ON	2015/05/12 03:21 PM
N591	114425	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:46 AM

		H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR					

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N592	12432	N591 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:46 AM

N593	3745	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:57 AM
N594	181474	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:58 AM

		H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR				

		G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR					

		G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N595	8932	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:58 AM
N596	186607	N594 N595	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:58 AM
N597	1162	(audes$8 zone with play$4) and play$5 with	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:59 AM

		different near3 (song media content config$6 set$6 align$6) and (sync synchron$8)					
N598	1772	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:59 AM
N599	1662198	(activ$7 audio signal) with detect$6	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:59 AM
N600	803	N597 and N599	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:59 AM
N601	165	N597 and N599 and N596	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 10:59 AM
N602	976	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:18 AM
N603	159	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N596	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:18 AM
N604	8	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:18 AM
N605	4	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:19 AM
N606	68	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:19 AM
N607	1	automat$6 near6 channel near3 (config$8 set$4 map$6) same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:19 AM
N608	13	"299847".ap.	US-PGPUB; USPAT	OR	ON	ON	2015/10/13

							11:21 AM
N609	1	"20140286507"	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:23 AM
N610	114425	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:27 AM

		OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR					

		H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N611	3995	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N610	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:27 AM
N612	4352	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:28 AM

		audio) and N610					
N613	3776	N594 and N595	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:41 AM
N614	163	N594 and N595 and N612	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 11:41 AM
N615	5373	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:00 PM
N616	624	(set$3top set adj top) same $6channel near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:00 PM
N617	58	N613 and N615	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:01 PM
N618	0	N613 and N616	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:01 PM
N619	7	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:13 PM
N620	5	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6 and N619	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 12:13 PM
N621	14	"5321636"	US-PGPUB; USPAT	OR	ON	ON	2015/10/13 03:05 PM
N622	1	"20020120925"	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 08:43 AM
N623	1	"20020120925" and search$6	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 08:43 AM
N624	1	"20020120925" and caption$6 same (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 08:45 AM
N625	1	"20020120925" and	US-PGPUB; USPAT	OR	ON	ON	2015/10/14

		caption$6 same (sync synchron$9) and (detect$6 search$6 found find$6)					08:54 AM
N626	1	"20020120925" and caption$6 same (sync synchron$9) and (detect$6 search$6 found find$6) and record$4	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 08:58 AM
N627	2	"20090173731"	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 12:41 PM
N628	10	"921550".ap.	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 05:58 PM
N629	1	"921550".ap. and 5d	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 05:58 PM
N630	3	disch.in. near3 sascha and 5d	US-PGPUB; USPAT	OR	ON	ON	2015/10/14 05:59 PM
N634	117173	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:33 PM

		G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162				

		OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR					

		H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N635	3683	N634 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:33 PM
N636	11	"465457".ap.	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:33 PM
N637	1	"20140361867"	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:34 PM
N638	42365	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:36 PM
N639	35933	N638 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:36 PM
N640	20704	N638 and ($6zone scene configu$8).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:36 PM
N641	1512	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:36 PM
N642	837	N641 and ($6zone scene configu$8).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:36 PM
N643	106	N641 and ($6zone scene	US-PGPUB; USPAT	OR	ON	ON	2016/01/11

		configu$8) and (speaker transducer loud$3speaker).ab.					02:37 PM
N644	247	N641 and ($6zone scene configu$8) and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:37 PM
N645	176	N641 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:41 PM
N646	1043	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:41 PM
N647	1945	N638 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:41 PM
N648	25	N646 and N647	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:41 PM
N649	505	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N638	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:45 PM
N650	100	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N641	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:45 PM
N652	9	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:49 PM
N653	2363	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N638	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:49 PM

N654	233	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N641	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:50 PM
N655	183438	(scene config$6 zone network$4) with play$4	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:50 PM
N656	7355	(scene config$6 zone network$4) with play$4 with ($5speak$3 transducer)	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:51 PM
N657	155	(scene config$6 zone network$4) with play$4 with ($5speak$3 transducer).clm. and N638	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:51 PM
N658	12	sonos.as. and mccord	US-PGPUB; USPAT	OR	ON	ON	2016/01/11 02:52 PM
N673	118242	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:51 PM

		G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162				

		OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR					

		H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N674	3856	N673 and ($6zone scene configu$8 set$4up) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:51 PM
N675	3769	N673 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:51 PM
N676	804	N673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:53 PM
N677	2617	N673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:54 PM
N678	947	N673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:54 PM
N679	3186	N673 and ($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:54 PM
N680	31661	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:54 PM
N681	10647	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 01:54 PM
N682	779	N673 and ($6zone scene	US-PGPUB; USPAT	OR	ON	ON	2016/02/02

		configu$8) same (speaker transducer loud$5speaker).ab.					02:08 PM
N683	10192	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:08 PM
N684	10083	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:08 PM
N685	564	N681 not N684	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:09 PM
N686	453	N681 not N684 and display$4	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:09 PM
N687	354	N681 not N684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:09 PM
N688	156	N681 not N684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:11 PM
N689	158	N681 not N684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:11 PM
N690	111	N681 not N684 and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:12 PM
N691	31661	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:12 PM
N692	1044	(N691 N681) not N684 and display$4 same ($6zone scene configu$8	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:12 PM

		set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)					
N693	29687	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:12 PM
N694	356	(N691 N681) not (N693 N684) and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:13 PM
N695	226	(N691 N681) not (N693 N684) and display$4 with ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) with (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:13 PM
N696	0	("2015/0373395").URPN.	USPAT	OR	ON	ON	2016/02/02 02:27 PM
N697	0	("2015/0095323").URPN.	USPAT	OR	ON	ON	2016/02/02 02:27 PM
N698	125401	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:27 PM

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR				

		G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)					
N699	156	N694 and N698	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:28 PM
N700	2111	second near3 play$5 near4 (media song title) and N698	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:38 PM
N701	695	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and N698	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:39 PM
N702	49	N694 and N701	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:39 PM
N703	1305	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and N698	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:39 PM
N704	695	N703 and N701	US-PGPUB; USPAT	OR	ON	ON	2016/02/02 02:40 PM
N705	2	("20090062943" "20110276333").pn.	US-PGPUB; USPAT	OR	ON	ON	2016/02/03 10:50 AM
N717	90	("20020002039"|"20020072816"|"20020124097"|"20040117044"|"20050131558"|"20050254505"|"20070288610"|"20080066094"|"	US-PGPUB; USPAT	OR	ON	ON	2016/02/04 01:19 PM

		20080077261"|"20080144861"|"6587127"|"6604023"|"7742832"|"8234395"|"20020026442"|"6757517"|"7130616"|"8103009"|"20050021470"|"20060041616"|"20080025535"|"20080045140"|"6778869"|"7130608"|"7626952"|"8189824"|"6404811"|"20130103873"|"7558224"|"7761176"|"7962482"|"8700730"|"20030157951"|"7657910"|"20030167335"|"20060149402"|"20080066120"|"20090228919"|"6631410"|"7187947"|"7817960"|"5923902"|"7483538"|"8423893"|"20030020763"|"20030177889"|"20040223622"|"20050002535"|"20050289224"|"20070142022"|"5946343"|"7668990"|"20040024478"|"6256554"|"7143939"|"7236773"|"20020003548"|"20030198257"|"20040010727"|"20050289244"|"5182552"|"7218708"|"7805210"|"7849181"|"8045952"|"6522886"|"8014423"|"20140093085"|"20040225389"|"20070142944"|"20080152165"|"20080162668"|"20010042107"|"7853341"|"8762565"|"8965544"|"20040015252"|"20040131192"|"20050144284"|"20070189544"|"20090097672"|"7302468"|"7539551"|"7571014"|"7643894"|"8239559"|"8290603"|"8788080"|"20020022453"|"6611537"). PN.					
N718	125524	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR	US-PGPUB; USPAT	OR	ON	ON	2016/02/04 01:19 PM

		G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR				

		G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR					

		H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)					
N719	1305	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and N718	US-PGPUB; USPAT	OR	ON	ON	2016/02/04 01:19 PM
N720	0	"2014074089"	US-PGPUB; USPAT	OR	ON	ON	2016/02/04 01:25 PM
N776	15	(US-20080159545-$ or US-20050177256-$ or US-20100153097-$ or US-20090232326-$ or US-20020173273-$ or US-20020022453-$ or US-20010042107-$ or US-20090060219-$).did. or (US-7689305-$ or US-8233635-$ or US-8054987-$ or US-7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$).did.	US-PGPUB; USPAT	OR	ON	ON	2016/03/08 12:35 PM
N788	2	(US-20020173273-$ or US-20090060219-$).did.	US-PGPUB	OR	ON	ON	2016/03/10 10:41 AM

N789	2	(US-20020173273-$ or US-20090060219-$).did.	US-PGPUB	OR	ON	ON	2016/03/10 10:41 AM
N790	95	("5668884"|"6611537"|"7571014"|"7657910"|"20120051558"|"20140016784"|"20140016802"|"20150201274"|"7490044"|"8063698"|"8160281"|"8306235"|"8831761"|"8977974"|"6522886"|"7792311"|"8843224"|"20140016786"|"20140226823"|"20140294200"|"7519188"|"8331585"|"8879761"|"8914559"|"5923902"|"6404811"|"6778869"|"7643894"|"8234395"|"7689305"|"20130259254"|"7251533"|"7383036"|"7607091"|"5218710"|"7483538"|"20110170710"|"20130010970"|"20140219456"|"7072477"|"8175292"|"8243961"|"8984442"|"5553147"|"6704421"|"6757517"|"8014423"|"20140355768"|"5910991"|"7630500"|"567332 3"|"7171010"|"8045952"|"8103009"|"20140023196"|"20140112481"|"20140355794"|"20150146886"|"4995778"|"7394480"|"8229125"|"8452020"|"8620006"|"8934655"|"6256554"|"6631410"|"6916980"|"7130608"|"7130616"|"20070142944"|"7853341"|"20120263325"|"20130028443"|"20140233755"|"8233632"|"8238578"|"8265310"|"8290185"|"8325935"|"8391501"|"8577045"|"5946343"|"6931134"|"7143939"|"7236773"|"20100142735"|"20120127831"|"20150063610"|"20150281866"|"8139774"|"8600075"|"8855319"|"8934647"|"8965546"|"9020153").PN.	US-PGPUB; USPAT	OR	ON	ON	2016/03/10 10:41 AM
N791	0	N789 and N790	US-PGPUB; USPAT	OR	ON	ON	2016/03/10 10:42 AM
N793	10	(US-20100010651-$ or US-20020098878-$ or US-20060179160-$ or US-20080092204-$ or	US-PGPUB; USPAT	OR	ON	ON	2016/03/10 01:49 PM

		US-20050177256-$).did. or (US-7587254-$ or US-8275307-$ or US-8639370-$ or US-7966085-$ or US-8135141-$).did.					
N820	121310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:27 PM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N821	3989	N820 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:27 PM
N822	4	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:27 PM

N823	121310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR					

		H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N824	852	N823 and ($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM
N825	10655	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM
N826	10543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM
N827	10655	N824 N825 N826	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM

N828	4189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:28 PM
N829	1150	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:29 PM
N830	34399	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:29 PM
N831	5915	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:29 PM
N832	1111	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:29 PM
N833	1071	N832 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:29 PM
N834	61513	((G06F3/165 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR H03G3/20 OR H03G1/02 OR H03G7/00 OR H04R2227/005 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04R2420/01 OR H04R2430/01 OR H04S7/30 OR H04H60/80 OR H04N21/43615).CPC. OR (381/17 OR 709/221 OR 709/230 OR 709/231 OR 715/716 OR 715/727 OR 715/734 OR 715/735).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:30 PM
N835	806	N827 AND N834	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:30 PM
N836	14	N835 AND (N828 N829)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 01:30 PM
N837	121310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM

		G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR					

		G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR				

		H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N838	852	N837 and ($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM
N839	10655	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM
N840	10543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM
N841	10655	N838 N839 N840	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM
N842	10655	N841	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:01 PM

N843	4189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:02 PM
N844	4189	N843	US-PGPUB; USPAT	OR	ON	ON	2016/05/27 03:02 PM
N904	208455	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:13 AM

		H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR				

		G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR					

		G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N905	9205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:13 AM
N906	3967	N905 and N904	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:13 AM
N907	69	N906 and ($6zone scene configu$8).ab. and	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:13 AM

		(speaker transducer loud$3speaker).ab.					
N908	131142	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:53 AM

		H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR				

		H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC. (700/94 381/104-109 715/716,727).ccls.)					
N909	804	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title) and N908	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:53 AM
N910	4514	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:53 AM
N911	2527	second near3 (speaker	US-PGPUB; USPAT	OR	ON	ON	2016/08/10

		transducer loud$5speaker playback near2 device) same (media song title) and (stereo multi$6channel multi$4 adj channel pair$4)					11:54 AM
N912	5835	second near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 11:54 AM
N913	15686	(plural$6 second multi$4) near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4 "5.1" surround$4)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:26 PM
N914	123888	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:41 PM

		G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR				

		G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR				

		H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N915	9205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:41 PM
N916	5859	N914 and N915	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:41 PM
N917	48	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N916	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:41 PM
N918	4308	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:41 PM
N919	243	N913 and N918	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 12:54 PM
N920	288	channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:26 PM
N921	15686	(plural$6 second multi$4) near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4 "5.1" surround$4)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:26 PM
N922	4308	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:26 PM
N923	243	N921 and N922	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:26 PM
N924	1737	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:44 PM

		H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and (700/94 715/716 715/727 340/4.41).CCLS.)					
N925	205	N924 and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:44 PM
N926	19130	($6zone scene configu$8).ab. and ($6zone scene configu$8).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:45 PM
N927	25946	($6zone scene configu$8 stereo pair$4).ab. and ($6zone scene configu$8 stereo pair$4).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:45 PM
N928	3394	($6zone scene configu$8 stereo pair$4).ab. and ($6zone scene configu$8 stereo pair$4).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.) and N921	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:46 PM
N929	1577	($6zone scene configu$8 (multi$channel multi$4 adj channel stereo) near3 (config$6 pair$4)).ab. and ($6zone scene configu$8 (multi$channel multi$4 adj channel stereo) near3 (config$6 pair$4)).clm. and ((speaker transducer loud$3speaker).ab. (speaker transducer loud$3speaker).clm.) and	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 01:47 PM

		N921					
N930	2	"20110043617"	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:06 PM
N931	4	"20150185964" "20060002572"	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:07 PM
N932	11	"158990".ap. and between	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:14 PM
N933	1	("2015/0185964").URPN.	USPAT	OR	ON	ON	2016/08/10 02:31 PM
N934	24	("20030035550" | "20030041332" | "20050166258" | "20070106941" | "20070143820" | "20070189544" | "20090135022" | "20090175599" | "20090265172" | "20110029326" | "20110157046" | "20120060116" | "20130117248" | "20140108010" | "20140226953" | "20140255003" | "20150163558" | "20150185964" | "5371551" | "6496205" | "6529586" | "7293279" | "8244105" | "9055271").PN. OR ("9274673").URPN.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:32 PM
N935	314	sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:49 PM
N936	12	sonos.as. and (N920 N925 N929)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 02:50 PM
N937	166	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:05 PM
N938	1195	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:05 PM

N939	14180	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:05 PM
N940	176	N938 and N939	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:05 PM
N941	6090	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:19 PM
N942	81	second near3 play$5 near4 (media song title) and sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:19 PM
N943	466330	(G06F3/165 OR G06F3/0482 OR G06F3/16 OR G06F3/0484 OR G06F17/30058 OR G06F3/04847 OR G06F17/3074 OR G06F3/04842 OR G06F17/00 OR G06F17/30749 OR G06F1/00 OR G06F1/12 OR G06F3/048 OR G06F3/04817 OR G06F3/167 OR G06F17/30772 OR G06F3/0486 OR G06F17/30053 OR G06F3/162 OR G06F9/5038 OR G06F17/30864 OR G06F1/26 OR G06F1/3203 OR G06F1/3206 OR G06F3/0488 OR G06F3/04883 OR G06F17/30035 OR G06F17/30038 OR G06F17/30504 OR G06F17/3053 OR G06F17/30743 OR G06F17/30761 OR G06F17/30867 OR G06F17/30876 OR G06F21/10 OR G06F21/6218 OR G06F3/017 OR G06F3/0481 OR G06F3/04886 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:20 PM

		H04R3/12 OR H04R2420/07 OR H04R3/04 OR H04R5/04 OR H04R11/00 OR H04R2430/03 OR H04R3/14 OR H04R29/00 OR H04R29/007 OR H04R2420/03 OR H04R2430/01 OR H04R2499/11 OR H04R29/001 OR H04R29/008 OR H04R3/00 OR H04N21/43615 OR H04N21/8113 OR H04N21/4307 OR H04N5/04 OR H04N9/7904 OR H04N21/26258 OR H04N21/41407 OR H04N21/4825 OR H04N21/4396 OR H04N21/458 OR H04N21/47217 OR H04N21/8106 OR H04N1/00 OR H04N21/25816 OR H04N21/4126 OR H04N21/42684 OR H04N21/44227 OR H04N21/6125 OR H04N21/6175 OR H04N21/6402 OR H04N21/6405 OR H04N21/6408 OR H04N21/00 OR H04N21/42218 OR H04N21/4222 OR H04N21/4227 OR H04N21/4302 OR H04N21/4316 OR H04N21/436 OR H04N21/43637 OR H04N21/439 OR H04N21/44222 OR H04N21/4425 OR H04N21/4524 OR H04N21/4725 OR H04N21/482 OR H04N21/4826 OR H04N21/6131 OR H04N21/6181 OR H04N21/6587 OR H04L65/4084 OR H04L65/60 OR H04L67/10 OR H04L65/80 OR					

		H04L67/1095 OR H04L67/12 OR H04L12/2854 OR H04L65/4076 OR H04L65/4092 OR H04L65/601 OR H04L67/26 OR H04L69/28 OR H04L2012/2849 OR H04L12/2812 OR H04L12/282 OR H04L12/2838 OR H04L63/08 OR H04L65/602 OR H04L12/12 OR H04L12/18 OR H04L12/2602 OR H04L12/28 OR H04L12/462 OR H04L1/0001 OR H04L2012/2841 OR H04L29/06027 OR H04L45/16 OR H04L45/22 OR H04L45/745 OR H04L61/6022 OR H04L63/105 OR H04L65/1003 OR H04L65/4023 OR H04L65/608 OR H04L12/2803 OR H04L12/2809 OR H04L12/2814 OR H04L12/2829 OR H04L12/2834 OR H04L12/4625 OR H04L12/6418 OR H04L63/083 OR H04L63/101 OR H04L63/108 OR H04L65/00 OR H04L65/1026 OR H04L65/1069 OR H04L65/4007 OR H04L65/403 OR H04L65/4069 OR H04L65/604 OR H04L67/02 OR H04L67/125 OR H04L67/142 OR H04L67/306 OR H04L67/325 OR H04L7/00 OR H03G3/20 OR H03G3/00 OR H03G3/001 OR H03G3/02 OR H03G3/04 OR H03G3/348 OR					

		H03G5/165 OR H03G7/002 OR H03G3/3089 OR H03G3/32 OR H03G5/005 OR G08C17/02 OR G08C23/04 OR G08C2201/40 OR G11B2020/10592 OR G11B20/10527 OR G11B27/105 OR G11B19/025 OR G11B2020/10972 OR G11B27/002 OR G11B20/10 OR G11B27/10 OR G11B19/027 OR G11B23/049 OR G11B27/00 OR G11B27/102 OR G11B27/34 OR H04H20/103 OR H04H20/26 OR H04H2201/20 OR H04H60/80 OR H04J3/0664 OR H04W56/0015 OR H04W84/20 OR H04W4/043 OR H04W40/02 OR H04W40/12 OR H04W4/003 OR H04W52/0212 OR H04W52/0219 OR H04W52/0251 OR H04W52/46 OR H04W84/18 OR H04W4/00 OR H04W4/008 OR H04W4/02 OR H04W4/021 OR H04W76/02 OR H04W76/028 OR H04W76/064 OR H04W84/12 OR H04B17/318 OR H04B17/00 OR H04S2400/03 OR H04S7/301 OR H04S3/008 OR H04S7/00 OR H04S7/302 OR H04S7/305 OR Y02B60/32 OR Y02B60/34 OR Y02B60/35 OR Y02B60/50 OR G01S3/80 OR G06Q20/20 OR					

		G06Q20/209 OR G06Q20/322 OR G06Q50/01 OR G07G1/0009).CPC.					
N944	19755	(700/94 OR 715/716 OR 381/109 OR 381/56 OR 381/58 OR 381/80 OR 705/16 OR 725/25 OR 726/28).CCLS.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:20 PM
N945	11442	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:21 PM
N946	10821	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:21 PM
N947	34398	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:21 PM
N948	32223	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:21 PM
N949	434	(N947 N945) not (N948 N946) and display$4 same ($6zone scene configu$8 set$4up snap$3shot cad) and (sync$3 synchron$9) same (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:21 PM
N950	357	(N943 N944) and N949	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:35 PM
N951	33	(N943 N944) and N949 and ((stereo surround$4 "5.1" sub$3woof$4 pair$4).clm. (stereo surround$4 "5.1" sub$3woof$4 pair$4).ab.)	US-PGPUB; USPAT	OR	ON	ON	2016/08/10 03:43 PM
N1011	21	(scene config$6 zone network$4) with play$4 and play$5 with different	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 10:42 AM

		near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N1012	52	("7324857" "7263110" "20020124097" "20050131558" "20030014486" "20040223622" "7295548" "6684060" "20040014426" "20070087686" "7987294" "6487296" "20040037433" "5361381" "7853341" "7653344" "7324857" "7263110" "20020124097" "20050131558" "20040223622" "7295548" "6684060" "7630501" "8600084" "8942395" "7987294" "7688306" "8150079" "8565455" "8374595" "6901439" "20030212802" "7305694" "20040168081" "7356011" "727754720030014486" "20040223622" "7295548" "6684060" "20070087686" "20040014426" "6487296" "20040037433" "5361381" "7853341" "8653344" "7987294" "4824059" "7095528" "5818948" "5151922" "6919771" "20010043456" "4731814" "5774016" "8654995" "20040185773" "7308188" "6535121" "5440644" "7324857" "7987294" "20020124097" "20050131558" "20030014484" "7627825" "6469633"	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 10:42 AM

		"5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7197148" "5182552" "6469633" "20020072816" "6931557").pn.					
N1013	0	N1011 and N1012	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 10:42 AM
N1014	3841	agere.as.	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 11:03 AM
N1015	463	agere.as. and audio	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 11:03 AM
N1016	1	"20070087686"	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 11:12 AM
N1017	13	"754155".ap.	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 12:10 PM
N1018	583	intensity and (path ray) near3 trac$4 and hash$4	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 12:11 PM
N1019	283	intensity and (path ray) near3 trac$4 and hash$4 and delay$6	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 12:11 PM
N1020	255	intensity and (path ray) near3 trac$4 and hash$4 and delay$6 and graph$4	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 12:11 PM
N1021	23	intensity and (path ray) near3 trac$4 and hash$4 and delay$6 and graph$4 and mesh$4	US-PGPUB; USPAT	OR	ON	ON	2017/01/03 12:12 PM
N1022	0	("2013/0002672").URPN.	USPAT	OR	ON	ON	2017/01/03 12:14 PM
N1023	10984	voxel$6	USPAT	OR	ON	ON	2017/01/03 12:14 PM
N1024	2723	voxel$6.clm.	USPAT	OR	ON	ON	2017/01/03 12:15 PM
N1025	360	voxel$6.clm. with surfac$4	USPAT	OR	ON	ON	2017/01/03 12:15 PM
N1029	226745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM

		H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR					

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR				

		H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1030	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM
N1031	4049	N1030 and N1029	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM
N1032	276	N1031 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM
N1033	71	N1031 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM

N1034	276	N1032 N1033	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:07 AM
N1035	4049	N1031	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:08 AM
N1036	565	N1031 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:08 AM
N1037	603	N1032 N1036	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:08 AM
N1038	11621	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:31 AM
N1039	1325	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:31 AM
N1040	12924	N1038 N1039	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:31 AM
N1041	75707	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM

		H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1042	4349	N1030 and N1041	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM
N1043	131115	((G10L19/008 OR G10L19/167 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM

		G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR				

		G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR				

		H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1044	131115	N1043	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM
N1045	138609	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1046	138609	N1045	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:40 AM
N1047	138609	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM

		G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1048	131115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM

		G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR				

		G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR					

		H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1049	226745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM

		H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR					

		G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR				

		H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR					

		H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1050	365944	N1047 N1048 N1049	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM
N1051	131115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM

		G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR				

		G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1052	131115	N1051	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM

N1053	100965	N1051 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM
N1054	100965	N1053	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:41 AM
N1055	226745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM

		H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR				

		G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR				

		G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1056	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1057	231903	N1056 N1055	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1058	4213	((G11B27/10 OR H03G3/10 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM

		H03G3/3026).CPC.)					
N1059	4213	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1060	4213	N1058 N1059	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1061	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1062	75707	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM

		H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1063	80565	N1061 N1062	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1064	131115	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM

		G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR				

		G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR				

		H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1065	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1066	134409	N1064 N1065	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1067	226745	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM

		H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR					

		H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24					

		OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR				

		H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1068	226745	N1067	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:42 AM
N1069	385172	N1041 N1043 N1045 N1047 N1048 N1049 N1051 N1055 N1056 N1058 N1061 N1062 N1064 N1065 N1067	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:45 AM
N1070	304007	N1069 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:45 AM
N1071	58345	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (700/94 715/716 715/727 340/4.41).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:47 AM
N1072	3397	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N1071	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:47 AM
N1073	13696	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N1069	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:48 AM
N1074	11715	N1070 and N1073	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:49 AM
N1075	4245	N1074 and (surround multi$channel multipl$5	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:50 AM

		near2 chanel "5.1" mpeg$4 aes$3)					
N1076	3345	N1074 and (surround multi$channel multipl$5 near2 chanel "5.1" mpeg$4 aes$3) and wireless$4	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:51 AM
N1077	2466	N1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:52 AM
N1078	3193	N1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4)	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:53 AM
N1079	1829	N1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:55 AM
N1080	572	N1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).clm. and pair$4	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:56 AM
N1081	196	N1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:56 AM
N1082	4	("8588949" "8938312" "9202509" "9219959").pn.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:56 AM
N1083	861352	((G06F3/165 OR G06F3/04842 OR G06F3/162 OR G06F17/30026 OR G06F17/30283 OR G06F3/0482 OR G06F3/04847 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:57 AM

		G06F3/04855 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR H04R2420/01 OR H04R2420/07 OR H04R2430/01 OR H04R29/008 OR H04R3/00 OR H04R3/12 OR H04R5/04 OR H04S7/30 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/00 OR H04S7/308 OR G05B15/02 OR G11B19/02 OR G11B27/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/20 OR H03G3/3026 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106).CPC. OR (1/1 OR 700/94 OR 381/104 OR 381/105 OR 381/106 OR 381/107 OR 381/108 OR 381/109 OR 715/716).CCLS.)					
N1084	1038	N1079 and N1083	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:58 AM
N1085	354	(N1080 N1081) and N1083	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 11:58 AM
N1086	256	("20130243199"|"20010043456"|"20010050991"|"20020072816"|"20020072817"|"20020078293"|"20020101357"|"20020124097"|"20020131761"|"20020137505"|"20020165921"|"20030014486"|"20030043856"|"20030063755"|"20030103088"|"20030167335"|"20030179780"|"20030185400"|"20030198257"|"20030212802"|"20030219007"|"20030231208"|"20040001591"|"20040014426"|"20040019807"|"20040037433"|"20040042629"|"20040059842"|"20040117462"|	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 12:04 PM

		20040168081"|"20040171 346"|"20040177167"|"200 40183827"|"20040185773 "|"20040203590"|"200402 23622"|"20040249490"|"2 0040253969"|"200500604 35"|"20050131558"|"2005 0154766"|"20050160270"| "20050197725"|"2006007 2489"|"20060173844"|"20 060222186"|"2006022798 5"|"20060259649"|"20060 270395"|"20070087686"|" 20080075295"|"20080205 070"|"20080303947"|"200 90011798"|"20090070434 "|"20090124289"|"201000 87089"|"20110001632"|"2 0110316768"|"201503659 87"|"3956591"|"4105974"| "4306114"|"4509211"|"45 30091"|"4701629"|"47318 14"|"4824059"|"4845751"| "4994908"|"5086385"|"51 51922"|"5182552"|"52373 27"|"5272757"|"5361381"| "5372441"|"5406634"|"54 30485"|"5440644"|"54574 48"|"5481251"|"5515345"| "5553314"|"5625350"|"56 40388"|"5661665"|"57402 35"|"5742623"|"5761320"| "5774016"|"5790543"|"58 12201"|"5818948"|"58320 24"|"5848152"|"5852722"| "5875233"|"5905768"|"59 46343"|"5956025"|"59600 06"|"5984512"|"5987611"| "5990884"|"5991307"|"59 99906"|"6018376"|"60291 96"|"6038614"|"6046550"| "6061457"|"6081266"|"60 88063"|"6101195"|"61279 41"|"6148205"|"6169725"| "6181383"|"6195435"|"62 12282"|"6246701"|"62694 06"|"6301012"|"6310652"| "6313879"|"6321252"|"63 53172"|"6356871"|"64181 50"|"6442443"|"6449642"| "6456783"|"6463474"|"64 66832"|"6469633"|"64872 96"|"6493832"|"6535121"| "6636269"|"6653899"|"66 54720"|"6654956"|"66840 60"|"6704421"|"6741961"| "6778073"|"6816510"|"68					

		26283"|"6859460"|"68595 38"|"6873862"|"6901439"| "6915347"|"6919771"|"69 31557"|"6937988"|"69877 67"|"7046677"|"7092528"| "7092694"|"7096169"|"71 20168"|"7130316"|"71369 34"|"7139981"|"7146260"| "7161939"|"7197148"|"72 06618"|"7260616"|"72631 10"|"7277547"|"7289631"| "7295548"|"7305694"|"73 08188"|"7324857"|"73560 11"|"7366206"|"7428310"| "7430181"|"7457948"|"74 72058"|"7492912"|"75058 89"|"7548744"|"7548851"| "7558224"|"7558635"|"76 27825"|"7630501"|"76533 44"|"7675943"|"7676044"| "7676142"|"7688306"|"77 21032"|"7746906"|"77611 76"|"7831054"|"7853341"| "7882234"|"7933418"|"79 45636"|"7945708"|"79663 88"|"7987294"|"7995732"| "8041062"|"8050203"|"81 50079"|"8170222"|"82330 29"|"8311226"|"8374595"| "8411883"|"8442239"|"84 77958"|"8565455"|"86000 84"|"8654995"|"8861739"| "8942395"|"D260764"|"D2 79779"|"D293671"|"D301 037"|"D304443"|"D31302 3"|"D313398"|"D313600"|" D320598"|"D322609"|"D3 26450"|"D327060"|"D331 388"|"D333135"|"D35053 1"|"D350962"|"D354059"|" D354751"|"D356093"|"D3 56312"|"D357024"|"D362 446"|"D363933"|"D36487 7"|"D364878"|"D365102"|" D366044"|"D372716"|"D3 77651"|"D379816"|"D380 752"|"D382271").PN.				
N1087	3	N1086 and moore.in.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 12:04 PM
N1088	8	("20040014426" "20070087686" "7987294" "6487296" "20040037433" "5361381" "7853341" "7653344").pn.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 12:05 PM

N1089	10	"619813".ap.	US-PGPUB; USPAT	OR	ON	ON	2017/02/17 12:18 PM
N1092	262	("4712105"|"7710941"|"20120051567"|"20010043456"|"20010050991"|"20020072816"|"20020072817"|"20020078293"|"20020101357"|"20020124097"|"20020131761"|"20020137505"|"20020165921"|"20030014486"|"20030043856"|"20030063755"|"20030103088"|"20030167335"|"20030179780"|"20030185400"|"20030198257"|"20030212802"|"20030219007"|"20030231208"|"20040001591"|"20040014426"|"20040019807"|"20040037433"|"20040042629"|"20040059842"|"20040117462"|"20040168081"|"20040171346"|"20040177167"|"20040183827"|"20040185773"|"20040203590"|"20040223622"|"20040249490"|"20040253969"|"20050060435"|"20050131558"|"20050154766"|"20050160270"|"20050197725"|"20060072489"|"3956591"|"4105974"|"4306114"|"4509211"|"4530091"|"4701629"|"4731814"|"4824059"|"4845751"|"4994908"|"5086385"|"5151922"|"5182552"|"5237327"|"5272757"|"5361381"|"5372441"|"5406634"|"5430485"|"5440644"|"5457448"|"5481251"|"5515345"|"5553314"|"5625350"|"5640388"|"5661665"|"5740235"|"5742623"|"5761320"|"5774016"|"5790543"|"5812201"|"5818948"|"5832024"|"5848152"|"5852722"|"5875233"|"5905768"|"5946343"|"5956025"|"5960006"|"5984512"|"5987611"|"5990884"|"5991307"|"5999906"|"6018376"|"6029196"|"6038614"|"6046550"|"6061457"|"6081266"|"6088063"|"6101195"|"6127941"|"6148205"|"6169725"|"6181383"|"6195435"|"621	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:40 PM

		2282"|"6246701"|"626940 6"|"6301012"|"6310652"|" 6313879"|"6321252"|"635 3172"|"6356871"|"641815 0"|"6442443"|"6449642"|" 6456783"|"6463474"|"646 6832"|"6469633"|"648729 6"|"6493832"|"6535121"|" 6636269"|"6653899"|"665 4720"|"6654956"|"668406 0"|"6704421"|"6741961"|" 6778073"|"6816510"|"682 6283"|"6859460"|"685953 8"|"6873862"|"6901439"|" 6915347"|"6919771"|"693 1557"|"6937988"|"698776 7"|"7046677"|"7092528"|" 7092694"|"7096169"|"712 0168"|"7130316"|"713693 4"|"7139981"|"7146260"|" 7161939"|"7197148"|"720 6618"|"7260616"|"726311 0"|"7277547"|"7289631"|" 7295548"|"7305694"|"730 8188"|"7324857"|"735601 1"|"7366206"|"7428310"|" 7430181"|"7457948"|"747 2058"|"7492912"|"750588 9"|"7548744"|"7548851"|" 7558224"|"7558635"|"762 7825"|"7630501"|"765334 4"|"7675943"|"7676044"|" 7676142"|"7688306"|"772 1032"|"7746906"|"776117 6"|"7831054"|"7853341"|" 7882234"|"7933418"|"794 5636"|"7945708"|"796638 8"|"7987294"|"7995732"|" 8041062"|"8050203"|"815 0079"|"8170222"|"823302 9"|"8311226"|"8374595"|" 8411883"|"8442239"|"847 7958"|"8565455"|"860008 4"|"8654995"|"8861739"|" 8942395"|"D260764"|"D2 79779"|"D293671"|"D301 037"|"D304443"|"D31302 3"|"D313398"|"D313600"|" D320598"|"D322609"|"D3 26450"|"D327060"|"D331 388"|"D333135"|"D35053 1"|"D350962"|"D354059"|" D354751"|"D356093"|"D3 56312"|"D357024"|"D362 446"|"D363933"|"D36487 7"|"D364878"|"D365102"|" D366044"|"D372716"|"D3				

		77651"|"D379816"|"D380752"|"D382271"|"D384940"|"D387352"|"D388792"|"D389143"|"D392641"|"D393628"|"D394659"|"D395889"|"D397996"|"D401587"|"D404741"|"D405071"|"D406847"|"D407071"|"D410927"|"D412337"|"D415496"|"D416021"|"D420006"|"D429246").PN.					
N1093	143	("D430143"|"D431552"|"D432525"|"D444475"|"D452520"|"D462339"|"D462340"|"D462945"|"D466108"|"D468297"|"D474763"|"D475993"|"D476643"|"D477310"|"D478051"|"D478069"|"D478896"|"D479520"|"D481056"|"D486145"|"D491925"|"D493148"|"D495333"|"D496003"|"D496005"|"D496335"|"D497363"|"D499086"|"D499395"|"D499718"|"D500015"|"D501477"|"D504872"|"D504885"|"D506463"|"D515072"|"D515557"|"D518475"|"D524296"|"D527375"|"20060173844"|"20060222186"|"20060227985"|"20060259649"|"20060270395"|"20070087686"|"20080075295"|"20080205070"|"20080303947"|"20090011798"|"20090070434"|"20090124289"|"20100087089"|"20110001632"|"20110316768"|"20150365987"|"20040185773"|"20050154766"|"20060222186"|"20060259649"|"20070087686"|"20080205070"|"20080303947"|"20090124289"|"20100087089"|"20110001632"|"3956591"|"4105974"|"4306114"|"5182552"|"5440644"|"5625350"|"5774016"|"5875233"|"6535121"|"6873862"|"7161939"|"7308188"|"7472058"|"7558635"|"7721032"|"7761176"|"7945708"|"7995732"|"8041062"|"8233029"|"8654995"|"8423893"|"8521316"|"20040015252"|"20040237750"|"	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:40 PM

		20060173972"|"20060205349"|"20080077261"|"20080092204"|"20080152165"|"20010042107"|"20020022453"|"20020026442"|"20020124097"|"20030157951"|"20040024478"|"20070142944"|"5923902"|"6256554"|"6404811"|"6522886"|"6611537"|"6631410"|"6757517"|"6778869"|"7130608"|"7130616"|"7143939"|"7236773"|"7483538"|"7571014"|"7643894"|"7657910"|"7853341"|"8014423"|"8045952"|"8103009"|"8234395"|"None"|"20080215169"|"20090251604"|"20110228944"|"20140256260"|"20040081099"|"6999827"|"7302468"|"7728911"|"7908637"|"7930644"|"8054987"|"8055353"|"8275307"|"8639370"|"8938312"|"20100054709"|"20050281138"|"20040031853"|"20020072816"|"20020098878"|"20030023329"|"20040239816"|"20050100174"|"20060029005"|"20060089735"|"20060229752"|"20100274372").PN.					
N1094	379	N1092 N1093	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:40 PM
N1095	75974	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR					

		H04H60/04).CPC.)					
N1096	131466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR					

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1097	138968	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1098	138968	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1099	131466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR				

		G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR				

		H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1100	227696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR					

		G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR				

		H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR				

		H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1101	131466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1102	227696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR					

		H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR				

		G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR				

		H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1103	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1104	4222	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1105	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1106	75974	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR				

		G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1107	131466	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR					

		H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1108	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1109	227696	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

		H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR				

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR				

		H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1110	386374	N1095 N1096 N1097 N1098 N1099 N1100 N1101 N1102 N1103 N1104 N1105 N1106 N1107 N1108 N1109	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1111	305122	N1110 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1112	13745	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N1110	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1113	11762	N1111 and N1112	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM

N1114	1842	N1113 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1115	880516	((G06F3/165 OR G06F3/04842 OR G06F3/162 OR G06F17/30026 OR G06F17/30283 OR G06F3/0482 OR G06F3/04847 OR G06F3/04855 OR H04R2227/005 OR H04R27/00 OR H04R2227/003 OR H04R2420/01 OR H04R2420/07 OR H04R2430/01 OR H04R29/008 OR H04R3/00 OR H04R3/12 OR H04R5/04 OR H04S7/30 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/00 OR H04S7/308 OR G05B15/02 OR G11B19/02 OR G11B27/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/20 OR H03G3/3026 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106).CPC. OR (1/1 OR 700/94 OR 381/104 OR 381/105 OR 381/106 OR 381/107 OR 381/108 OR 381/109 OR 715/716).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1116	1051	N1114 and N1115	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:41 PM
N1117	1331	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1118	15625	(output pair$5 channel	US-PGPUB; USPAT	OR	ON	ON	2017/02/28

		surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6					12:44 PM
N1119	16704	N1117 N1118	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1120	21	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1121	12295	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1122	11605	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1123	37335	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1124	34922	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1125	41076	N1121 N1122 N1123 N1124	US-PGPUB; USPAT	OR	ON	ON	2017/02/28 12:44 PM
N1126	76417	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR				

		G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1127	132061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR					

		H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1128	139524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1129	139524	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1130	132061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR				

		G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1131	229330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR					

		H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR				

		H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR				

		G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1132	132061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR					

		G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					

N1133	229330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR					

		G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR				

		H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)						
N1134	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1135	4243	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1136	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1137	76417	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR				

		H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1138	132061	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR				

		G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR					

		H04R3/04).CPC.)					
N1139	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1140	229330	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

		H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR					

		G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR					

		G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1141	388327	N1126 N1127 N1128 N1129 N1130 N1131 N1132 N1133 N1134 N1135 N1136 N1137 N1138 N1139 N1140	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1142	306969	N1141 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM

N1143	13828	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N1141	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1144	11841	N1142 and N1143	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1145	1869	N1144 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 12:22 PM
N1146	1	"14304410"	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:05 PM
N1147	49	baudino.in. and local	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:06 PM
N1148	51	baudino.in. and local$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:06 PM
N1149	6	baudino.in. and local$4 and surround	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:06 PM
N1150	11	"629937".ap.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:12 PM
N1151	1	"20150180434"	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:12 PM
N1152	17010	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. OR (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:13 PM
N1153	1078	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:13 PM
N1154	85	N1145 and N1153	US-PGPUB; USPAT	OR	ON	ON	2017/03/15

							01:13 PM
N1155	67	N1145 and N1153 not sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:14 PM
N1156	24	("5937176"|"20030170009"|"7690017"|"20060215630"|"8396578"|"20070143801"|"20070143801"|"6892167"|"20050237952"|"20060248173"|"20060233120"|"5675390"|"8266516"|"20060165385"|"4710917"|"6522646"|"20090089813"|"7668964"|"6711647"|"20050041604"|"20070091906"|"20040054689"|"6202211"|"8335576"|"20030055635").PN.	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:25 PM
N1157	1	N1156 and "6202211"	US-PGPUB; USPAT	OR	ON	ON	2017/03/15 01:27 PM
N1179	76512	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1180	132177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR				

		G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR				

		H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1181	139622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1182	139622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N1183	132177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR				

		G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR					

		H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1184	229627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR				

		G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR				

		H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1185	132177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR					

		G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR				

		H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1186	229627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR					

		H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR				

		H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR					

		G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1187	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1188	4247	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1189	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1190	76512	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N1191	132177	((G10L19/008 OR G10L19/167 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR				

		G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR				

		H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1192	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1193	229627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM

		H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR					

		H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR				

		G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR					

		H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1194	388692	N1179 N1180 N1181 N1182 N1183 N1184 N1185 N1186 N1187 N1188 N1189 N1190 N1191 N1192 N1193	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1195	13865	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N1194	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 02:57 PM
N1196	4103	N1179 and N1195	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:09 PM
N1197	2164	N1196 and (bond$4 exclus$6 dynamic$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:11 PM
N1198	681	N1196 and (bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:11 PM
N1199	1311	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:12 PM

N1200	1267	N1199 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:12 PM
N1201	347	N1199 and (stereo mono monaural left right) and N1179	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:15 PM
N1202	805	N1196 and (bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot network$4)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:15 PM
N1203	132177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:23 PM

		H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR					

		H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1204	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:23 PM
N1205	5920	N1203 and N1204	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:23 PM

N1206	55	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1205	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:23 PM
N1207	347	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1201	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:24 PM
N1208	347	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1201	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:25 PM
N1209	347	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with (diverg$5 uniqu$6 original$5 different) near3 (song media content) and (sync synchron$8) and N1201	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:26 PM
N1210	295	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with (diverg$5 uniqu$6 original$5 different) near3 (song media content) and (sync synchron$8) and N1198	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:28 PM
N1211	295	N1209 and N1210	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:28 PM
N1212	29	N1205 and N1210	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:29 PM
N1213	6109604	s "167"	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM
N1214	229627	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM

		H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR					

		H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR				

		G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR					

		H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N1215	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM
N1216	4054	N1215 and N1214	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM
N1217	71	N1216 and ($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM
N1218	71	N1217	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:41 PM
N1219	1350	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:44 PM
N1220	1350	N1219	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:44 PM

N1221	139622	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:45 PM
N1222	139622	N1221	US-PGPUB; USPAT	OR	ON	ON	2017/03/18

							03:45 PM
N1223	4247	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:45 PM
N1224	304	N1223 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:45 PM
N1225	5	N1224 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:45 PM
N1226	5	N1225	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:45 PM
N1227	5605	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 03:52 PM
N1228	132177	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:01 PM

		G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR				

		G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR					

		H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1229	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:01 PM
N1230	5920	N1228 and N1229	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:01 PM
N1231	2768	(output pair$5 channel surround$4 lfe) same config$8 and N1230	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:01 PM
N1232	3536	(output pair$5 channel surround$4 lfe) same (zone scene config$8 snap$shot network$4) and N1230	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:01 PM
N1233	1	"2005004532"	US-PGPUB; USPAT	OR	ON	ON	2017/03/18 04:33 PM
N1265	6195	group$6 with volume near2 (control$4 adjust$6 command$4 instruct$4)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:38 AM
N1266	2631640	second near4 (volume device control$4 adjust$6 command$4 instruct$5)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:38 AM
N1267	15	upnp$4 with adjust$6 near2 (volume gain amplitude)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:39 AM
N1268	10586603	"7"	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:40 AM
N1269	900	upnp$4 and adjust$6 near2 (volume gain amplitude)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:44 AM
N1270	240	upnp$4 and adjust$6 near2 (volume gain amplitude) same network$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:45 AM

N1271	3	upnp$4 and adjust$6 near2 (volume gain amplitude) same network$4 and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:45 AM
N1272	15	upnp$4 and adjust$6 near2 (volume gain amplitude) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:45 AM
N1273	599	(surround "5.1" "7.1") with mix$4 and volume near3 group$6	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:53 AM
N1274	611	(surround "5.1" "7.1") with mix$4 and volume near3 (bus group$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:53 AM
N1275	1275	(surround "5.1" "7.1") with mix$4 and (gain volume level amplitude) near3 (bus group$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:53 AM
N1276	345	(surround "5.1" "7.1") with mix$4 and (gain volume level amplitude) near3 (bus group$6) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 11:53 AM
N1277	0	shdema.in. and upnp$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 12:57 PM
N1278	1	"20030086580" and (gain volume level amplitude) near3 (bus group$6) and @ad<="20040605"	US-PGPUB; USPAT	OR	ON	ON	2017/03/21 01:03 PM
N1304	761	((G06F3/165 g06f3/162).CPC. and (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:36 PM
N1305	10981	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:36 PM
N1306	225743	($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:36 PM
N1307	27436	($6zone scene configu$8) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:37 PM

N1308	546	N1307 and N1305	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:39 PM
N1309	10278	($6zone scene configu$8) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8) near6 (display$5)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:39 PM
N1310	10371	($6zone scene configu$8 snap$shot) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8 snap$shot) near6 (display$5)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:40 PM
N1311	1	"20160026429"	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:40 PM
N1312	453	N1307 and N1305 not sonos.as.	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:42 PM
N1313	308	N1307 and N1305 not sonos.as. and @ad<="20140723"	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:42 PM
N1314	2	("2009/0171677").URPN.	USPAT	OR	ON	ON	2017/03/27 04:52 PM
N1315	9	("20030182001" | "20060069828" | "20070079308" | "20090119684" | "20090171677" | "5703794" | "6904475" | "7743389" | "8250573").PN. OR ("8972984").URPN.	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:53 PM
N1316	1314	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:53 PM
N1317	9	("2008/0141134").URPN.	USPAT	OR	ON	ON	2017/03/27 04:55 PM

N1318	9129	(additional second$4 plural$6) near3 (speaker transducer loud$5speaker playback near2 device) same (media song title)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:55 PM
N1319	351	N1310 and N1308	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:56 PM
N1320	71	N1310 and N1304	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 04:57 PM
N1321	21	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:27 PM
N1322	341	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 "not" near2 display$4)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:28 PM
N1323	1	"not" near2 display$6	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:28 PM
N1324	5	"not" with display$6	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:29 PM
N1325	357787	(without "not") with display$6	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:43 PM
N1326	160219	(without "not" does) near3 display$6	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:43 PM
N1327	1136	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:44 PM
N1328	210	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:44 PM

		same (group$6 zone config$8 scene snap$shot)					
N1329	0	("2016/0378426").URPN.	USPAT	OR	ON	ON	2017/03/27 05:50 PM
N1330	14	("2011/0185036").URPN.	USPAT	OR	ON	ON	2017/03/27 05:51 PM
N1331	102	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and $5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:55 PM
N1332	57	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and $5speaker same (scene config$6 zone network$4 snap$shot group$6)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 05:56 PM
N1333	162	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:43 PM
N1334	40	N1332 and N1333	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:44 PM
N1335	12434	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:48 PM
N1336	11734	($6zone scene configu$8	US-PGPUB; USPAT	OR	ON	ON	2017/03/27

		) same (speaker transducer loud$5speaker).ab.					06:48 PM
N1337	37769	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:48 PM
N1338	35330	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:48 PM
N1339	41526	N1335 N1336 N1337 N1338	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:48 PM
N1340	144	(N1335 N1336 N1337 N1338) and N1304	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:48 PM
N1341	293	N1339 and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	ON	2017/03/27 06:56 PM
N1342	5	("2012/0210225").URPN.	USPAT	OR	ON	ON	2017/03/27 06:59 PM
N1364	1	("5440644"|"5761320"|"6032202"|"6469633"|"7295548"|"7630501"|"7987294"|"8483853"|"None").PN. and undefin$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1365	1	"20160026428"	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1366	12465	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1367	11763	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1368	37880	($6zone scene configu$8 set$4up snap$3shot cad)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM

		same (speaker transducer loud$5speaker playback near2 device).clm.					
N1369	35436	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1370	41640	N1366 N1367 N1368 N1369	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1371	295	N1370 and (unshown invisible undisplay$4 (without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1372	295	N1370 and (unshown invisible undisplay$4 ($undefin$6 without "not" does) near3 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:22 PM
N1373	342	N1370 and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:24 PM
N1374	11885	($6zone scene configu$8 set$4up snap$3shot cad)same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:25 PM
N1375	35617	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:25 PM
N1376	342	(N1366 N1368 N1374 N1375 N1367 N1369) and (unshow$4 invisible undisplay$4 $undefin$6 (	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:25 PM

		without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface)					
N1377	10274	N1366 and high$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:27 PM
N1378	1	N1365 and high$4	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:27 PM
N1379	339	(N1366 N1368 N1374 N1375 N1367 N1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface) and (strength power signal)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:28 PM
N1380	47	(N1366 N1368 N1374 N1375 N1367 N1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface) and (strength power) near2 signal	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:28 PM
N1381	51624	((G06F3/165 OR H04L67/02 OR H04L67/10 OR H04R2227/005 OR H04R29/007).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:29 PM
N1382	33	N1376 and N1381	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:29 PM
N1383	2	N1380 and N1382	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:29 PM
N1384	78	N1380 N1382	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:29 PM

N1385	342	(N1366 N1368 N1374 N1375 N1367 N1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) same (group$6 zone config$8 scene snap$shot) and (gui (user graphic$6) near2 interface) and (time season day month year strength power signal)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:30 PM
N1386	33	N1381 and N1385	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:44 PM
N1387	1244	(N1366 N1368 N1374 N1375 N1367 N1369) and N1381	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:44 PM
N1388	101	(N1366 N1368 N1374 N1375 N1367 N1369) and (unshow$4 invisible undisplay$4 $undefin$6 (without "not" does)) near3 (show$4 defin$6 display$6) and N1381	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:45 PM
N1389	0	mccord and morganstern	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:55 PM
N1390	15	mccord and sonos	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 04:55 PM
N1391	5641	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:01 PM
N1392	5654	(scene config$8 snap$shot network$4 zone set$up cad) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:02 PM
N1393	278	(N1366 N1368 N1374 N1375 N1367 N1369) and N1392 and N1381	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:04 PM
N1394	5560	(scene config$6 zone	US-PGPUB; USPAT	OR	ON	ON	2017/03/31

		network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)					05:14 PM
N1395	5560	(scene config$6 zone network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1392	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:14 PM
N1396	964	(scene config$6 zone network$4 CAD snap$shot set$up) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1381	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:14 PM
N1397	964	N1395 and N1396	US-PGPUB; USPAT	OR	ON	ON	2017/03/31 05:16 PM
N1479	9	"505966".ap.	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:38 AM
N1480	1	"20150058727"	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:38 AM
N1481	60297	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:39 AM
N1482	1653	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:39 AM

		(715/716 700/94).CCLS.)					
N1483	6992	N1481 and (speaker loud$speaker transducer) with (network$4 wireless intelligent smart)	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:40 AM
N1484	385	N1482 and (speaker loud$speaker transducer) with (network$4 wireless intelligent smart)	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 08:40 AM
N1485	1	"20150286360"	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 09:39 AM
N1486	1	"8290603".pn.	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 09:39 AM
N1487	0	"20150058727" and group near2 scene	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:16 AM
N1488	1	"20150058727" and (multi$zone and group$4 with scene)	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:17 AM
N1489	1	N1486 and (multi$zone and group$4 with scene)	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:20 AM
N1490	1	N1486 and (multi$zone and group$4 with scene) and party	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:20 AM
N1491	14	"737199".ap.	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:37 AM
N1492	1	"20160364206" and group near2 scene	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:37 AM
N1493	0	"20160364206" and display$6 with second near3 group$4	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:43 AM
N1494	4424	party with mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:50 AM
N1495	391	party near2 mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:50 AM
N1496	0	"8290603".pn. and applu	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:51 AM

N1497	1	"8290603".pn. and apply	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:51 AM
N1498	863	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:52 AM
N1499	7	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:53 AM
N1500	15	party near2 mode with (icon display$6 control$6 command$6) same $5speaker	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:54 AM
N1501	8	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not N1499	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:54 AM
N1502	8	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not N1499 and party near2 mode	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:55 AM
N1503	1	"8483853".pn.	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 10:57 AM
N1512	5	"2101795"	US-PGPUB; USPAT	OR	ON	ON	2017/04/21 05:09 PM
N1525	32	"5625697" "20050254640"	US-PGPUB; USPAT	OR	ON	ON	2017/04/22 07:45 AM
N1526	1	"20150286360"	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:01 PM
N1527	1	"214324".ap. and physic$6	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:07 PM
N1528	3	"214324".ap. and (push$button push$4)	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:10 PM
N1529	3	"214324".ap. and (interface)	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:14 PM
N1530	6	"214324".ap. and attach$4	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:16 PM
N1531	4	"214324".ap. and integ$6	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:18 PM

N1532	7	"214324".ap. and upon	US-PGPUB; USPAT	OR	ON	ON	2017/04/24 03:21 PM
N1566	10	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:11 PM
N1567	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not N1566 and party near2 mode	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:11 PM
N1568	13	"629937".ap.	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:11 PM
N1569	2	"20150180434"	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:12 PM
N1570	2	N1569 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC. OR (381/107 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:13 PM
N1571	23157	((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC. OR (381/107 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:13 PM
N1572	150204	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:13 PM

		G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR				

		G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR				

		H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1573	1149	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N1572	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:13 PM
N1574	1149	N1573	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:13 PM
N1575	5595	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:16 PM
N1576	5595	N1575	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:16 PM
N1577	5595	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:17 PM

N1578	39329	(eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:17 PM
N1579	1702646	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:18 PM
N1580	40904	(output pair$5 channel surround$4) with config$8 and N1572	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:18 PM
N1581	59540	(output pair$5 channel surround$4) with (kind type config$8) and N1572	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:23 PM
N1582	1852	N1581 and N1578	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:23 PM
N1583	1186	(zone scene config$9) with play$4 and N1582	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:24 PM
N1584	1071	(zone scene config$9) with play$4 same (eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:24 PM
N1585	1	"20070087686"	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:25 PM
N1586	10214	((H04H40/36 OR H04R2205/024 OR H04R2420/05 OR H04R2420/07 OR H04S3/00 OR H04S7/30 OR H04S7/301 OR H04S7/308).CPC. OR (455/3.06).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:25 PM
N1587	211	N1586 and N1584	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:25 PM
N1588	1	"20070087686" and (eq equal$9 process$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:26 PM
N1589	1	"20070087686" and (frequen$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:32 PM
N1590	50	(US-20080247554-$ or US-20080077261-$ or US-20050031135-$ or	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:37 PM

		US-20080045140-$ or US-20030031333-$ or US-20090180632-$ or US-20020196951-$ or US-20050069153-$ or US-20010042107-$ or US-20060294569-$ or US-6072879-$ or US-20060009985-$ or US-20030179891-$ or US-20060177073-$ or US-6091826-$ or US-6996240-$ or US-7412067-$ or US-20020072816-$ or US-5572443-$ or US-20030099365-$ or US-20100202624-$ or US-6611603-$ or US-5870484-$ or US-6584204-$ or US-6546298-$ or US-6829131-$ or US-6566960-$ or US-20100303250-$ or US-5675390-$ or US-5479536-$ or US-20020135696-$ or US-7184556-$ or US-5745586-$ or US-4661982-$ or US-5638343-$ or US-20020184626-$ or US-6385596-$ or US-20050144468-$ or US-20010048749-$ or US-20020080268-$ or US-20020145611-$ or US-20030026438-$ or US-20030058786-$ or US-20030065806-$ or US-20030090592-$ or US-20030185301-$ or US-20040070687-$ or US-20040196279-$ or US-20040228367-$ or US-20050114899-$).did.					
N1591	4	N1590 and N1578	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:38 PM
N1592	18	(output pair$5 channel surround$4) with config$8 and N1590	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:42 PM
N1593	16	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:42 PM

		and N1590 not N1591					
N1594	13	(output pair$5 channel surround$4) with config$8 and N1590 and (eq equal$9)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:45 PM
N1595	17	(output pair$5 channel surround$4) with config$8 and N1590 and (eq equal$9 frequenc$4)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:45 PM
N1596	59	("2008/0077261").URPN.	USPAT	OR	ON	ON	2018/08/08 04:49 PM
N1597	30	("2008/0077261").URPN. not mccord	USPAT	OR	ON	ON	2018/08/08 04:49 PM
N1598	1030	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020015003" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" | "20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" |	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:51 PM

		"20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" | "20030020763" | "20030023741" | "20030031333" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030055892" | "20030061428" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030091322" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030110329" | "20030126211" | "20030135822" | "20030157951" | "20030161479" | "20030167335" | "20030172123").PN. OR ("20030177889" | "20030179780"					

		"20030185400" | "20030195964" | "20030198254" | "20030198255" | "20030198257" | "20030200001" | "20030204273" | "20030204509" | "20030210796" | "20030212802" | "20030219007" | "20030227478" | "20030229900" | "20030231208" | "20030231871" | "20030235304" | "20040001106" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040012620" | "20040014426" | "20040015252" | "20040019497" | "20040019807" | "20040019911" | "20040023697" | "20040024478" | "20040024925" | "20040027166" | "20040032348" | "20040032421" | "20040037433" | "20040041836" | "20040042629" | "20040044742" | "20040048569" | "20040059842" | "20040059965" | "20040066736" | "20040071299" | "20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "20040117044" | "20040117462" | "20040128701" | "20040131192" | "20040133689" | "20040143368" | "20040143852" | "20040147224" | "20040148237" |				

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N1599	148	N1598 and N1581	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:59 PM
N1600	3	N1599 and N1587	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 04:59 PM
N1601	415	("2004/0024478").URPN.	USPAT	OR	ON	ON	2018/08/08 05:17 PM
N1602	3	N1599 and N1601	USPAT	OR	ON	ON	2018/08/08 05:21 PM
N1603	1746053	(output pair$5 channel surround$4) with config$8 N1578 N1581	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:22 PM
N1604	720	N1603 and (N1598 N1601)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:22 PM
N1605	344	N1603 and (N1601)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:22 PM
N1606	104	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:23 PM
N1607	85	N1606 and N1603	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:24 PM
N1608	65108	second near3 (speaker transducer loud$5speaker	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:27 PM

		playback near2 device)					
N1609	119610	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:28 PM
N1610	2408	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device) and N1578	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:28 PM
N1611	268	(multiple multiplicity plural$4 additional subesq$7 second) near3 (speaker transducer loud$5speaker playback near2 device) same N1578	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 05:28 PM
N1612	8	("2015/0289124").URPN.	USPAT	OR	ON	ON	2018/08/08 05:56 PM
N1613	20186	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 06:08 PM
N1614	150204	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 06:10 PM

		G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR				

		G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR					

		G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N1615	5992	N1614 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 06:10 PM
N1616	12629	N1614 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 06:10 PM
N1617	22	("20040196994" | "20040247144" | "20050147261" | "20050195995" | "20070030982" | "5500900" | "5622172" | "5751817" | "5802180" | "5943427" | "6118875" | "6498856" | "6990205" | "7116788" | "7174229" | "7590249").PN. OR ("8638946").URPN.	US-PGPUB; USPAT	OR	ON	ON	2018/08/08 06:26 PM
N1764	2566	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:21 PM
N1765	197	N1764 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:21 PM
N1766	969440	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:28 PM

N1767	228	"s1262"	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1768	20344	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1769	20344	N1768	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1770	24	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1771	24	N1770	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1772	10063	N1766 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:29 PM
N1773	824	N1766 and N1768 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:31 PM
N1774	530410	(input audio) with (activat$6 detect$6) same (output pair$5 channel surround$4)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:38 PM
N1777	6402846	(zone snapshot snap adj shot grouping grouped groupwise scene configure configuration)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:52 PM

N1778	2566	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:52 PM
N1779	2566	N1778	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:52 PM
N1780	197	N1778 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1781	197	N1780	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1782	969440	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1783	969440	N1782	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1784	228	"s1262"	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1785	228	N1784	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1786	20344	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1787	20344	N1786	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1788	228	N1784	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:53 PM
N1789	20344	N1786	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:54 PM
N1790	20344	N1789	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:54 PM
N1791	24	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:54 PM

		line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N1792	24	N1791	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:54 PM
N1793	10063	N1782 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1794	10063	N1793	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1795	824	N1782 and N1786 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1796	824	N1795	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1797	530410	(input audio) with (activat$6 detect$6) same (output pair$5 channel surround$4)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1798	530410	N1797	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1799	530410	N1797	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:55 PM
N1800	666516	N1777 and N1782	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:56 PM
N1801	1105	N1786 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:56 PM

		OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)					
N1802	774	N1800 and N1801	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 12:56 PM
N1803	0	("2018/0115825").URPN.	USPAT	OR	ON	ON	2018/08/22 01:22 PM
N1804	0	("2016/0253145").URPN.	USPAT	OR	ON	ON	2018/08/22 01:22 PM
N1805	28	("20050131558" | "20080109095" | "20100064218" | "20120096018" | "20120198339" | "20130132081" | "20130339031" | "20140095176" | "20140172953" | "20150081274" | "20150104037" | "20150139464" | "20150162006" | "20150170665" | "20150193193" | "20160034249" | "20160035352" | "20160210966" | "20160249437" | "20160295340" | "20160353217" | "20160379638" | "7643894" | "8725277" | "8874448" | "9087520" | "9271111" | "9484030").PN. OR ("9898250").URPN.	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:22 PM
N1806	66	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "20080152312" | "20090076881" | "20090179867" | "20090234476" | "20100017714" | "20100325239" | "20120054278" | "20130243199" |	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:42 PM

		"20130317635" | "20130331970" | "20130339397" | "20140037107" | "20140093085" | "20140122590" | "20140146970" | "20140181659" | "20140230015" | "20140310058" | "20150179227" | "20150186110" | "20150237409" | "20150245138" | "20150286360" | "20160180248" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7921369" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8788080" | "8843500" | "8903526" | "9246866" | "9330096").PN.					
N1807	1	("2015/0237409").URPN.	USPAT	OR	ON	ON	2018/08/22 01:43 PM
N1808	373	active with audio with detect$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:44 PM
N1809	2333	activ$6 with audio with detect$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:44 PM
N1810	969440	(input audio) with (activat$6 detect$6)".ab,clm.'"	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:44 PM
N1811	255081	(input audio) with (activat$6 detect$6).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:44 PM
N1812	28	(zone snapshot snap adj shot grouping grouped groupwise scene configure configuration)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:45 PM

		with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N1813	21846	((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:45 PM
N1814	49958	(line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6 activ$6)	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:47 PM
N1815	5294	(line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6 activ$6).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:47 PM
N1816	157627	N1777 and N1811	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:47 PM
N1817	3660	N1813 and N1811	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:47 PM
N1818	127	N1777 and N1813 and N1814	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:48 PM
N1819	8	N1813 and N1815	US-PGPUB; USPAT	OR	ON	ON	2018/08/22 01:50 PM
N1922	0	"853790".ap. and nickname	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:12 AM
N1923	5	("013740" "806070").ap. and nickname	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:13 AM
N1924	35	nicknam$4 same stereo	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:13 AM
N1925	998	party near2 mode same (icon display$6 control$6	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:15 AM

		command$6) same$5speaker					
N1926	101527	(second third nick) near2 nam$3 nick$name	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:16 AM
N1927	46	N1925 and N1926	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:16 AM
N1928	72	((second third nick) near2 nam$3 nick$name) same stereo	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:20 AM
N1929	37	((second third nick) near2 nam$3 nick$name) same stereo not N1924	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:21 AM
N1930	1	"228812".ap. and stereo	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:21 AM
N1931	21326	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:50 AM
N1932	7250	second near3 (speaker transducer loud$5speaker playback near2 device) same (stereo multi$6channel multi$4 adj channel pair$4)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:50 AM
N1933	5840	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:50 AM
N1934	5847	(zone scene config$9 snap$shot) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:50 AM
N1935	225443	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 11:51 AM
N1936	5941	N1926 and N1935	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:17 PM
N1937	1466	N1926 and N1935 and (stereo surround "5.1")	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:18 PM

N1938	1	"20160342387"	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:18 PM
N1939	52187	((G06F17/30026 OR G06F3/04842 OR G06F3/162 OR G06F3/165 OR G11B19/02 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04S2400/01 OR H04S2400/13 OR H04S3/008 OR H04S7/308).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:19 PM
N1940	275	N1939 and N1937	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:19 PM
N1941	2	N1937 and wachter.in.	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:22 PM
N1942	553	group$6 and wachter.in.	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:24 PM
N1943	2	group$6 and pinch and wachter.in.	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:24 PM
N1944	9	("20080177822" | "20090179867" | "20110273380" | "20120121105" | "20120184335" | "20120274664" | "20130019193" | "20130080955" | "8290603").PN.	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 12:27 PM
N1945	32	("2013/0080955").URPN.	USPAT	OR	ON	ON	2018/11/30 12:35 PM
N1946	347182	(scene config$6 zone network$4 snap$shot) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 01:02 PM
N1947	413139	(scene config$6 zone network$4 snap$shot map$6 group$4) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 01:04 PM

N1948	410155	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 01:05 PM
N1949	347182	N1946 and N1947	US-PGPUB; USPAT	OR	ON	ON	2018/11/30 01:05 PM
N1984	22	"s1873"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1985	227864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1986	102325	(second third nick) near2 nam$3 nick$name	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1987	227864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1988	6011	N1986 and N1987	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1989	6011	N1988	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:12 PM
N1990	1483	N1986 and N1987 and (stereo surround "5.1")	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1991	1483	N1990	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1992	1	"20160342387"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1993	1	N1992	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1994	52883	((G06F17/30026 OR G06F3/04842 OR G06F3/162 OR G06F3/165 OR G11B19/02 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04S2400/01 OR H04S2400/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM

		H04S3/008 OR H04S7/308).CPC.)					
N1995	52883	N1994	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1996	283	N1994 and N1990	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1997	283	N1996	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:16 PM
N1998	14369	($6zone scene configu$8 snap$shot) same (speaker transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8 snap$shot) near6 (display$5)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N1999	14369	N1998	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N2000	1200	(zone scene config$9) with play$4 same (eq equal$9) same (smart intelligen$6 wireless$4 network$4 playback) near3 (player $6speaker device)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N2001	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N2002	315	N2001 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N2003	27	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM
N2004	21659	(output pair$5 channel surround$4) with (set$6	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:17 PM

		config$8 map$5) and network$6 near5 $6speak$6					
N2005	63	N2004 and (N2001 N2002)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:25 PM
N2006	27	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2007	27	N2006	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2008	27	N2007	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2009	999322	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2010	10717	N2009 and ((G06F3/162 OR G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R3/12 OR H04R3/00 OR G11B27/10 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2011	10717	N2010	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:27 PM
N2012	10717	N2010	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:28 PM
N2013	10717	N2012	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:28 PM
N2014	470	party near2 mode same (icon display$6 control$6 command$6) and $5speaker	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:28 PM
N2015	470	N2014	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:28 PM
N2016	477374	(bond$4 exclus$6	US-PGPUB; USPAT	OR	ON	ON	2019/01/04

		dynamic$6) with (zone scene config$8 snap$shot)					05:36 PM
N2017	2701530	(output pair$5 channel surround$4) with (kind type config$8)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:37 PM
N2018	21659	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:37 PM
N2019	1	"8290603".pn. and apply	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:49 PM
N2020	1	N2019	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:49 PM
N2021	1009	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:49 PM
N2022	1009	N2021	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:49 PM
N2023	1009	N2021	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:58 PM
N2024	10	party near2 mode with (icon display$6 control$6 command$6) with $5speaker	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:58 PM
N2025	10	N2024	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:58 PM
N2026	20	party near2 mode with (icon display$6 control$6 command$6) same $5speaker	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:58 PM
N2027	20	N2026	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:58 PM
N2028	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not N2024	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM
N2029	10	N2028	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM

N2030	10	party near2 mode with (icon display$6 control$6 command$6) same $5speaker not N2024 and party near2 mode	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM
N2031	10	N2030	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM
N2032	1	"8483853".pn.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM
N2033	1	N2032	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 05:59 PM
N2034	3458	"s1509"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:01 PM
N2035	5749	"s1510"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:01 PM
N2036	49	baudino.in. and local	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2037	49	N2036	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2038	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2039	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR				

		G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR					

		H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2040	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2041	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2042	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR				

		G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR				

		G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2043	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR					

		G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR				

		H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					

N2044	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR					

		H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2045	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR					

		H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR				

		G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR					

		H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2046	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2047	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2048	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2049	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR					

		H04H60/04).CPC.)					
N2050	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR					

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2051	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2052	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

		H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR					

		H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR				

		G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR				

		H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2053	462039	N2038 N2039 N2040 N2041 N2042 N2043 N2044 N2045 N2046 N2047 N2048 N2049 N2050 N2051 N2052	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2054	376490	N2053 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2055	18386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2053	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2056	16247	N2054 and N2055	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2057	2869	N2056 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM

N2058	2869	N2057	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2059	16247	N2056	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:02 PM
N2060	52818	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:04 PM
N2061	9225	N2048	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2062	9225	N2046	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2063	94737	N2038	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2064	1870	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2065	1870	N2064	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2066	21659	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2067	21659	N2066	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2068	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR					

		G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2069	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2070	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2071	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2072	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR				

		G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR				

		H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2073	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02					

		OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR				

		H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR					

		G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2074	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR				

		G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2075	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR					

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR				

		H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2076	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2077	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2078	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2079	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301				

		OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2080	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR				

		G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2081	9225	704/500-502.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04

		700/94.ccls.					06:05 PM
N2082	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

		H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR					

		G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR				

		H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2083	462039	N2068 N2069 N2070 N2071 N2072 N2073 N2074 N2075 N2076 N2077 N2078 N2079 N2080 N2081 N2082	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2084	376490	N2083 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM
N2085	376490	N2084	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:05 PM

N2086	9225	N2078	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:17 PM
N2087	4975	N2077	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:17 PM
N2088	1129	"s1090"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:18 PM
N2089	155341	N2072	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:18 PM
N2090	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2091	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR				

		G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR					

		G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2092	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2093	162655	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2094	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR					

		G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2095	287861	((H04S7/30 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04

		H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR					06:25 PM

		H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR				

		G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR				

		H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2096	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR				

		G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR				

		H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2097	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR					

		G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR				

		H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR					

		H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2098	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2099	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2100	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2101	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2102	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR				

		G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR				

		H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2103	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2104	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR					

		H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR					

		H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR					

		G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2105	462039	N2090 N2091 N2092 N2093 N2094 N2095 N2096 N2097 N2098 N2099 N2100 N2101 N2102 N2103 N2104	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2106	376490	N2105 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2107	18386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2105	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2108	16247	N2106 and N2107	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2109	905	N2108 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab,clm. and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2110	155341	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM

		G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR					

		G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR					

		H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2111	7343	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2110	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:25 PM
N2112	2683	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:26 PM
N2113	73090	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with audio)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:26 PM
N2114	17	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:31 PM
N2115	1920308	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:31 PM
N2116	781874	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:31 PM

N2117	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:32 PM
N2118	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:32 PM
N2119	24977	N2116 and N2117	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:32 PM
N2120	11	"487686".ap.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:32 PM
N2121	1	"20170223458"	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:37 PM
N2122	2787	N2119 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:38 PM
N2123	798	N2116 and N2117 and (eq equaliz$9).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:38 PM
N2124	3228	N2116 and N2117 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:38 PM
N2125	933	N2124 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/01/04 06:38 PM
N2126	3	("2017/0099538").URPN.	USPAT	OR	ON	ON	2019/01/04 06:43 PM
N2127	0	("2015/0067511").URPN.	USPAT	OR	ON	ON	2019/01/04 06:44 PM
N2128	781874	(output pair$5 channel surround$4) with (zone	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 11:41 AM

		scene snapshot config$8).clm,ab.					
N2129	781874	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 11:41 AM
N2130	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 11:41 AM
N2131	3228	N2129 and N2130 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 11:41 AM
N2132	798	N2129 and N2130 and (eq equaliz$9).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 11:41 AM
N2133	3	("2013/0097510").URPN.	USPAT	OR	ON	ON	2019/01/05 12:18 PM
N2134	19	("20050069153" | "20050119879" | "20060004583" | "20070033021" | "20090316930" | "20110038490" | "20110096933" | "20110135103" | "20110137643" | "20110238426" | "20110274281" | "20110274292" | "20130096926" | "20130097510" | "20130114830" | "5406634" | "5572443" | "8077880" | "8194874").PN. OR ("9307322").URPN.	US-PGPUB; USPAT	OR	ON	ON	2019/01/05 12:25 PM
N2135	3	("2007/0033021").URPN.	USPAT	OR	ON	ON	2019/01/05 12:27 PM
N2136	53	("2006/0004583").URPN.	USPAT	OR	ON	ON	2019/01/05 12:40 PM
N2137	108	("2013/0028443").URPN.	USPAT	OR	ON	ON	2019/01/05 12:41 PM
N2139	1907	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM

N2140	1907	N2139	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM
N2141	96104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM

		OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2142	96104	N2141	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM
N2143	22136	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM
N2144	118	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:09 PM
N2145	53602	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:11 PM
N2146	92622	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:12 PM
N2147	96180	(scene config$6 zone network$4 snap$shot	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:13 PM

		map$3 group$5 $6zone scene configu$8 set$4up snap$3shot cad) with ($6speaker play$4).clm,ab.					
N2148	122164	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic $6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:13 PM
N2149	122148	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:13 PM
N2150	326	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:15 PM
N2151	32506	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:24 PM
N2152	2394	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:26 PM

N2153	2723	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:26 PM
N2154	76	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:26 PM
N2155	20	N2150 and N2151	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:26 PM
N2156	53602	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:29 PM
N2157	136058	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:29 PM
N2158	36348	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:31 PM
N2159	167	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:43 PM

		same (relation$6 proportion$6 optim$8 config$6 group$6) and 381/119.ccls.					
N2160	571	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6) and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:43 PM
N2161	1464	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:44 PM
N2162	1464	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:45 PM
N2163	225	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).ab,clm. and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:46 PM
N2164	0	N2154 and N2163	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:46 PM
N2165	31	N2148 and N2163	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:46 PM
N2166	128	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6).ab,clm. and 381/119.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:47 PM
N2167	1045	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:48 PM

		group$6).ab,clm. and ("381".clas. 700/94.ccls.)					
N2168	358	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.) and N2148	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:48 PM
N2169	47953	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:50 PM
N2170	59474	("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 02:51 PM
N2171	312	N2169 and N2170	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:04 PM
N2172	28	("2015/0223002").URPN.	USPAT	OR	ON	ON	2019/02/22 03:05 PM
N2173	96104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2174	155277	((G10L19/008 OR G10L19/167 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR				

		G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR				

		H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2175	152826	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2176	152826	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2177	155277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR				

		G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR				

		G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2178	288619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR					

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR					

		H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10					

		OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2179	155277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR					

		H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2180	288619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR					

		H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR				

		G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR				

		H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2181	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2182	5012	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2183	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2184	96104	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR					

		G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2185	155277	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2186	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2187	288619	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM

		H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR					

		H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR				

		G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR				

		H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2188	456352	N2173 N2174 N2175 N2176 N2177 N2178 N2179 N2180 N2181 N2182 N2183 N2184 N2185 N2186 N2187	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2189	18243	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2188	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:09 PM
N2190	3191	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2188 and N2170	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:35 PM
N2191	37788	N2188 and N2170	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:35 PM

N2192	313789	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:35 PM
N2193	5592	N2188 and N2169	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:36 PM
N2194	273	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2188 and N2169	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:36 PM
N2195	722	N2149 and N2188 and N2169	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 03:36 PM
N2196	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:42 PM
N2197	62985	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:42 PM
N2198	41299	N2188 and N2197	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:42 PM
N2199	3261	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2198	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:42 PM
N2200	1272	N2188 and "323" and N2198	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:43 PM
N2201	294	N2188 and N2169 and N2198	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:43 PM
N2202	5617	(N2197 N2188) and N2169	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:47 PM
N2203	47953	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:47 PM
N2204	18997	(mixer ui gui user near3 (interfac$5 environ$6)	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:47 PM

		fader operator) same (relation$6 proportion$6 optim$8).ab,clm. and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6)					
N2205	64317	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	ON	2019/02/22 04:49 PM
N2206	38783	differen$6 near3 score	US-PGPUB; USPAT	OR	ON	ON	2019/02/25 09:07 AM
N2207	647	out near3 vocabulary and (includ$4 in) near3 vocabulary	US-PGPUB; USPAT	OR	ON	ON	2019/02/25 09:08 AM
N2208	508	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7	US-PGPUB; USPAT	OR	ON	ON	2019/02/25 09:08 AM
N2209	455	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7 and (featur$6)	US-PGPUB; USPAT	OR	ON	ON	2019/02/25 09:09 AM
N2210	84	(oov out near3 vocabulary) and (IV (includ$4 in) near3 vocabulary) and phras$7 and (featur$6 near4 vector)	US-PGPUB; USPAT	OR	ON	ON	2019/02/25 09:09 AM
N2215	83529	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:41 PM
N2216	0	N2215 with volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:41 PM

N2217	0	N2215 with volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:41 PM
N2218	6886	N2215 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:42 PM
N2219	925	N2215 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:42 PM
N2220	2418	N2218 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:42 PM
N2221	276	N2219 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:42 PM
N2222	84	N2219 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:42 PM
N2223	84286	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94 381/119 715/1716).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2224	7045	N2223 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2225	969	N2223 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2226	2466	N2224 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2227	290	N2225 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2228	88	N2225 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:47 PM
N2229	4	N2228 not N2222	US-PGPUB; USPAT	OR	ON	ON	2019/03/01 04:48 PM
N2230	2	("5737485"	US-PGPUB; USPAT	OR	ON	ON	2019/03/03

		"5493540").pn.					02:14 PM
N2231	72	("5737485" "5493540")	US-PGPUB; USPAT	OR	ON	ON	2019/03/03 02:14 PM
N2232	1588775	(train$6 learn$6 neural)	US-PGPUB; USPAT	OR	ON	ON	2019/03/03 02:14 PM
N2233	64	N2231 and N2232	US-PGPUB; USPAT	OR	ON	ON	2019/03/03 02:14 PM
N2234	22355	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2235	22355	N2234	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2236	798725	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2237	215571	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2238	25617	N2236 and N2237	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2239	25617	N2238	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2240	96872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR					

		H04H60/04).CPC.)					
N2241	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR					

		H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2242	153592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2243	153592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2244	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR					

		G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR				

		H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2245	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR					

		G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR				

		H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR				

		H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2246	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2247	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR				

		H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR				

		G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR					

		H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2248	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2249	5050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2250	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2251	96872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR				

		G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2252	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR					

		H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2253	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2254	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM

		H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR				

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR				

		H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2255	459201	N2240 N2241 N2242 N2243 N2244 N2245 N2246 N2247 N2248 N2249 N2250 N2251 N2252 N2253 N2254	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2256	374433	N2255 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2257	374433	N2256	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 09:59 AM
N2258	48351	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (mixer ui gui	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		user near3 (interfac$5 environ$6) fader operator) same (config$6 group$6).ab,clm.					
N2259	96872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2260	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR					

		G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR				

		H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2261	153592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2262	153592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2263	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2264	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR				

		H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR				

		G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR				

		H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2265	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR				

		G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR					

		G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2266	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR					

		G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR					

		H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR				

		H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2267	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2268	5050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2269	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2270	96872	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2271	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR				

		G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2272	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2273	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM

		OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR					

		G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR				

		H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR					

		H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2274	459201	N2259 N2260 N2261 N2262 N2263 N2264 N2265 N2266 N2267 N2268 N2269 N2270 N2271 N2272 N2273	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2275	275	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2274 and N2258	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2276	275	N2275	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:01 AM
N2277	84164	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:02 AM
N2278	935	N2277 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:02 AM
N2279	87	N2278 and (sync synchron$9).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:02 AM
N2280	8	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:03 AM
N2281	153592	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM

		G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2282	6076	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM

		synchron$8)					
N2283	2360	second near3 play$5 near4 (media song title) and N2281	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM
N2284	561	N2282 and N2283	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM
N2285	156185	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2286	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM
N2287	5855	N2285 and N2286	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM
N2288	60	zone with play$4 and play$5 with different	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:04 AM

		near3 (song media content) and (sync synchron$8) and N2287					
N2289	935	N2277 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:54 AM
N2290	1	"009182".ap. and volume.ti.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:54 AM
N2291	84921	(700/94 381/119).ccls. ((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:55 AM
N2292	855	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N2291	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:55 AM
N2293	67	N2292 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:56 AM
N2294	94	N2292 and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 10:56 AM
N2295	1168	N2291 and (proportion$6 averag$4) and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:00 AM
N2296	614	N2291 and (proportion$6 averag$4) near11 (gain level setting volume) and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:00 AM
N2297	62	N2291 and (proportion$6 averag$4) near11 (gain level setting volume) and (gain level setting volume) near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:01 AM

		and @ad<="20030728"					
N2298	36	N2291 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:02 AM
N2299	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:03 AM
N2300	0	N2298 and N2299	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:03 AM
N2301	27	N2291 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728" and group$6	US-PGPUB; USPAT	OR	ON	ON	2019/03/20 11:03 AM
N2302	70874	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 02:38 PM
N2303	39758	"2203"	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 02:38 PM
N2309	2834	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:20 PM
N2310	2834	N2309	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:20 PM
N2311	76717	(digital$3 wireless$3 network$6 smart intellige$6 cognit$6) near3 (playback adj device $6speaker transducer monitor with audio)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2312	76717	N2311	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM

N2313	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2314	19	N2313	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2315	1996633	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2316	1996633	N2315	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2317	815239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2318	218212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2319	26224	N2317 and N2318	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2320	26224	N2319	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2321	815239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2322	218212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2323	837	N2321 and N2322 and (eq equaliz$9).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2324	837	N2323	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:21 PM
N2325	1983	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:25 PM
N2326	1983	N2325	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:25 PM
N2327	22994	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:26 PM

		network$6 near5 $6speak$6					
N2328	22994	N2327	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:26 PM
N2329	120	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:26 PM
N2330	120	N2329	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:26 PM
N2331	55310	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:28 PM
N2332	55310	N2331	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:28 PM
N2333	94800	(scene config$6 zone network$4 snap$shot map$3 group$5) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:28 PM
N2334	94800	N2333	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:28 PM
N2335	98391	(scene config$6 zone network$4 snap$shot map$3 group$5 $6zone scene configu$8 set$4up snap$3shot cad) with ($6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM
N2336	98391	N2335	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM
N2337	125119	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic $6speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM
N2338	125119	N2337	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM

N2339	125102	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM
N2340	125102	N2339	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:45 PM
N2341	331	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:46 PM
N2342	331	N2341	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:46 PM
N2343	33559	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2344	33559	N2343	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2345	2451	(scene config$6 zone network$4 snap$shot map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2346	2451	N2345	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2347	2789	(scene config$6 zone network$4 snap$shot	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM

		map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6).clm,ab.					
N2348	2789	N2347	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2349	77	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2350	77	N2349	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2351	20	N2341 and N2343	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2352	20	N2351	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2353	55310	($6zone scene configu$8 set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2354	55310	N2353	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2355	139176	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2356	139176	N2355	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:47 PM
N2357	55310	N2353	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:59 PM
N2358	139176	N2355	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:59 PM
N2359	37640	(scene config$6 zone network$4 snap$shot	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:59 PM

		map$3 group$5) with (speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) and (mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8 config$6 group$6).clm,ab.					
N2360	37640	N2359	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:59 PM
N2361	98810	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 03:59 PM

		H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2362	158664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:00 PM

		G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR				

		G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR				

		G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2363	158664	N2362	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:00 PM
N2364	155701	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:00 PM

		G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2365	155701	N2364	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:00 PM
N2366	155701	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM

		OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2367	155701	N2366	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2368	0	"s21773"	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2369	158664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM

		G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR					

		G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR					

		H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2370	158664	N2369	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2371	296203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM

		H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR					

		G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR					

		H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR				

		H04W8/22).CPC.)					
N2372	296203	N2371	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2373	158664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM

		OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR					

		H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2374	158664	N2373	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2375	296203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM

		H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR					

		H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR				

		G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR					

		H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2376	296203	N2375	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:04 PM
N2377	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:13 PM
N2378	9224	N2377	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:13 PM
N2379	5111	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:13 PM
N2380	5111	N2379	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:13 PM
N2381	62969	"381".clas. 704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:13 PM
N2382	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM

N2383	98810	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM

		H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2384	158664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM

		G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR				

		G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR				

		H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2385	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2386	296203	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM

		H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR					

		G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR				

		H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2387	465927	N2361 N2362 N2364 N2366 N2369 N2371 N2373 N2375 N2377 N2379 N2382 N2383 N2384 N2385 N2386	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM

N2388	465927	N2387	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2389	59458	("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2390	3191	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2387 and N2389	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2391	3191	N2390	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2392	37671	N2387 and N2389	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2393	37671	N2392	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:14 PM
N2394	321605	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8) and (config$6 group$6)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:17 PM
N2395	321605	N2394	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:17 PM
N2396	62969	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:17 PM
N2397	41182	N2387 and N2396	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:17 PM
N2398	41182	N2397	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:17 PM
N2399	64301	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2400	64301	N2399	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2401	86839	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM

		H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94).CCLS.)					
N2402	0	N2401 with volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2403	0	N2402	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2404	0	N2401 with volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2405	0	N2404	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:18 PM
N2406	0	N2402	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2407	86839	N2401	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2408	0	N2402	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2409	7166	N2401 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2410	7166	N2409	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2411	956	N2401 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2412	956	N2411	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2413	2532	N2409 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2414	2532	N2413	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:21 PM
N2415	289	N2411 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:22 PM
N2416	289	N2415	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:22 PM
N2417	89	N2411 and (sync	US-PGPUB; USPAT	OR	ON	ON	2019/05/24

		synchron$9).ab,clm.					04:22 PM
N2418	89	N2417	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:22 PM
N2419	87595	((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC. OR (700/94 381/119 715/1716).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2420	7324	N2419 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2421	7324	N2420	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2422	1000	N2419 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2423	1000	N2422	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2424	815239	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2425	218212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2426	26224	N2424 and N2425	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2427	26224	N2426	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:31 PM
N2428	17650	N2419 and (gain level amplitude volume).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:32 PM
N2429	865	N2424 and N2425 and N2428	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:32 PM

N2430	9	automat$6 near6 channel near3 map$6 and (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:34 PM
N2431	0	N2429 and N2430	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:34 PM
N2432	1	"129758".ap. and kallai	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:40 PM
N2433	72915	700/94.ccls. "381".clas. ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:40 PM
N2434	1996633	(output pair$5 channel surround$4) with (zone scene snapshot config$8)".clm,ab.125" and N2424	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:41 PM
N2435	17559	"177" and N2424	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:41 PM
N2436	815392	45and N2424	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:42 PM
N2437	19206	N2353 and N2424	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:42 PM
N2438	865	N2429 and N2424	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:42 PM
N2439	766	N2438 and N2433	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:43 PM
N2440	1983	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:44 PM
N2441	24	N2438 and N2440	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:44 PM

N2442	302338	(song media content audio sound) same (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:45 PM
N2443	228	N2438 and N2442	US-PGPUB; USPAT	OR	ON	ON	2019/05/24 04:45 PM
N2444	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2445	88051	(700/94 381/119).ccls. ((G05B15/02 OR G06F16/27 OR G06F3/0482 OR G06F3/04842 OR G06F3/04847 OR G06F3/04855 OR G06F3/162 OR G06F3/165 OR G11B27/00 OR H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/008 OR H04S7/00 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2446	36	N2445 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2447	28	group$4 with (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728"	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2448	0	N2446 and N2447	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2449	0	N2448	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2450	13	"128443".ap.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM

N2451	1	"128443".ap. and kallai	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 05:53 PM
N2452	27	N2445 and (proportion$6 averag$4) near11 (gain level setting volume) with adjust$6 and (gain level setting volume) near3 adjust$6.ab,clm. and @ad<="20030728" and group$6	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2453	27	N2452	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2454	3016	"s2305"	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2455	71174	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2456	71174	N2455	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2457	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2458	19	N2457	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:00 PM
N2459	99184	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				

N2460	159102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR					

		H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2461	156069	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2462	156069	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2463	159102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR				

		G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR				

		H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2464	297417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR					

		G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR					

		H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR				

		H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2465	159102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2466	297417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR					

		H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR				

		G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR				

		H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2467	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2468	5115	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2469	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2470	99184	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR					

		G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2471	159102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2472	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2473	297417	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

		H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR					

		H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR				

		G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR				

		H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2474	467389	N2459 N2460 N2461 N2462 N2463 N2464 N2465 N2466 N2467 N2468 N2469 N2470 N2471 N2472 N2473	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2475	382391	N2474 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2476	18971	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2474	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2477	16835	N2475 and N2476	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM

N2478	320	N2477 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 06:01 PM
N2481	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2482	9224	N2481	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2483	156141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM

		H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2484	5119	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2485	315	N2484 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2486	13578	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2487	1761	(N2483 N2485) and N2486	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2488	14957	N2487 "s87"	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2489	159217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM

		G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR				

		G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR					

		G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2490	6856	N2489 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2491	6856	N2490	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2492	156141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM

		OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2493	6234	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2494	2407	second near3 play$5 near4 (media song title) and N2492	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2495	581	N2493 and N2494	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:48 PM
N2496	15307	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:51 PM
N2497	500	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (N2484 N2485)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:54 PM
N2498	1049	N2495 N2497	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 07:57 PM
N2499	32	N2495 and N2497	US-PGPUB; USPAT	OR	ON	ON	2019/06/06

							07:57 PM
N2500	99266	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2501	159217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR				

		G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR					

		H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2502	156141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2503	156141	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2504	159217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR					

		H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2505	297684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR					

		H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR				

		G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR				

		H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2506	159217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR					

		G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR				

		G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2507	297684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR					

		G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR				

		H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					

N2508	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2509	5119	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2510	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2511	99266	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2512	159217	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR				

		G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR				

		G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2513	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2514	297684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM

		H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR					

		G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR					

		H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10					

		OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2515	467719	N2500 N2501 N2502 N2503 N2504 N2505 N2506 N2507 N2508 N2509 N2510 N2511 N2512 N2513 N2514	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2516	382706	N2515 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2517	18990	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2515	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2518	16854	N2516 and N2517	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2519	3057	N2518 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2520	1106	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2521	90	N2519 and N2520	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:02 PM
N2522	55979	($6zone scene configu$8 set$4up snap$3shot cad config$8 schem$3) same (speaker transducer loud$5speaker playback near2 device).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:06 PM
N2523	159	("2005/0131558").URPN.	USPAT	OR	ON	ON	2019/06/06 08:11 PM
N2524	9	("20030004724" | "20030198254" |	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:18 PM

		"20030198255" | "20040205204" | "20050131558" | "20050254662" | "20060002681" | "20060013407" | "20080155616").PN.					
N2525	112	("2006/0002681").URPN.	USPAT	OR	ON	ON	2019/06/06 08:19 PM
N2526	7458	(output pair$5 channel surround$4) with (set$6 config$8 map$5 group$6 scene zone schem$2).clm,ab. and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:21 PM
N2527	1394	(output pair$5 channel surround$4) with (set$6 config$8 map$5 group$6 scene zone schem$2).clm,ab. and (play$5 network$6) near3 (device $6speak$6) same (sync synch$3 synchroni$9).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/06/06 08:22 PM
N2533	1	"20190014413"	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:31 AM
N2534	200	("20050159833"|"20050160270"|"20050166135"|"20050168630"|"20050177256"|"20050177643"|"20050181348"|"20050195205"|"20050195823"|"20050197725"|"20050198574"|"20050201549"|"20050216556"|"20050254505"|"20050262217"|"20050266798"|"20050266826"|"20050281255"|"20050283820"|"20050288805"|"20050289224"|"20050289244"|"20060041616"|"20060041639"|"20060045281"|"20060072489"|"20060095516"|"20060098936"|"20060119497"|"20060143236"|"20060149402"|"20060155721"|"20060173844"|"20060179160"|"20060193454"|"20060193482"|"20060199538"|"20060205349"|"200602221	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:32 AM

		86"|"20060227985"|"2006 0229752"|"20060259649"| "20060270395"|"2006029 4569"|"20070003067"|"20 070003075"|"2007002220 7"|"20070038999"|"20070 043847"|"20070047712"|" 20070048713"|"20070054 680"|"20070071255"|"200 70087686"|"20070142022 "|"20070142944"|"200701 43493"|"20070169115"|"2 0070180137"|"200701895 44"|"20070192156"|"2007 0206829"|"20070223725"| "20070249295"|"2007026 5031"|"20070271388"|"20 070288610"|"2007029977 8"|"20080002836"|"20080 007649"|"20080007650"|" 20080007651"|"20080018 785"|"20080022320"|"200 80025535"|"20080045140 "|"20080065232"|"200800 66094"|"20080066120"|"2 0080072816"|"200800752 95"|"20080077261"|"2008 0077619"|"20080077620"| "20080086318"|"2008009 1771"|"20080092204"|"20 080120429"|"2008012694 3"|"20080144861"|"20080 144864"|"20080146289"|" 20080152165"|"20080159 545"|"20080162668"|"200 80189272"|"20080205070 "|"20080212786"|"200802 15169"|"20080242222"|"2 0080247554"|"200802630 10"|"20080303947"|"2009 0011798"|"20090017868"| "20090031336"|"2009006 0219"|"20090070434"|"20 090089327"|"2009009767 2"|"20090100189"|"20090 124289"|"20090157905"|" 20090164655"|"20090169 030"|"20090180632"|"200 90193345"|"20090222115 "|"20090228919"|"200902 32326"|"20090251604"|"2 0100004983"|"201000106 51"|"20100031366"|"2010 0049835"|"20100052843"| "20100067716"|"2010008 7089"|"20100142735"|"20 100153097"|"2010022874					

		0"|"20100272270"|"20100284389"|"20100290643"|"20100299639"|"20110001632"|"20110002487"|"20110044476"|"20110066943"|"20110110533"|"20110170710"|"20110228944"|"20110299696"|"20110316768"|"20120029671"|"20120030366"|"20120047435"|"20120051558"|"20120051567"|"20120060046"|"20120127831"|"20120129446"|"20120148075"|"20120185771"|"20120192071"|"20120207290"|"20120237054"|"20120263325"|"20120281058"|"20120290621"|"20130010970"|"20130018960"|"20130028443"|"20130031475"|"20130038726"|"20130041954"|"20130047084"|"20130051572"|"20130052940"|"20130070093"|"20130080599"|"20130094670"|"20130124664"|"20130129122"|"20130132837"|"20130159126"|"20130167029"|"20130174100"|"20130174223"|"20130179163"|"20130191454"|"20130197682"|"20130208911"|"20130208921"|"20130226323"|"20130230175"|"20130232416"|"20130236029"|"20130243199"|"20130253679"|"20130253934"|"20130259254"|"20130279706"|"20130287186"|"20130290504"|"20130293345"|"20140006483"|"20140016784"|"20140016786"|"20140016802").PN.				
N2535	261	("20140023196"|"20140037097"|"20140064501"|"20140075308"|"20140075311"|"20140079242"|"20140108929"|"20140112481"|"20140123005"|"20140140530"|"20140161265"|"20140181569"|"20140219456"|"20140226823"|"20140242913"|"20140256260"|"20140267148"|"20140270202"|"20140273859"|"20140279889"|"20140285313"|	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:32 AM

		"20140286496"|"2014029 4200"|"20140298174"|"20 140323036"|"2014034468 9"|"20140355768"|"20140 355794"|"20140378056"|" 20150019670"|"20150026 613"|"20150032844"|"201 50043736"|"20150049248 "|"20150063610"|"201500 74527"|"20150074528"|"2 0150098576"|"201501392 10"|"20150146886"|"2015 0201274"|"20150256954"| "20150281866"|"2015028 6360"|"20150304288"|"20 150365987"|"2017018815 2"|"3956591"|"4105974"|" 4296278"|"4306114"|"438 2158"|"4509211"|"453009 1"|"4696037"|"4701629"|" 4712105"|"4731814"|"481 6989"|"4824059"|"484575 1"|"4994908"|"4995778"|" 5086385"|"5151922"|"515 3579"|"5182552"|"518568 0"|"5237327"|"5239458"|" 5272757"|"5299266"|"536 1381"|"5372441"|"540663 4"|"5430485"|"5440644"|" 5457448"|"5467342"|"548 1251"|"5491839"|"551534 5"|"5519641"|"5533021"|" 5553147"|"5553222"|"555 3314"|"5596696"|"560299 2"|"5623483"|"5625350"|" 5640388"|"5652749"|"566 1665"|"5668884"|"567332 3"|"5696896"|"5726989"|" 5740235"|"5742623"|"575 1819"|"5761320"|"577401 6"|"5787249"|"5790543"|" 5808662"|"5812201"|"581 5689"|"5818948"|"583202 4"|"5848152"|"5852722"|" 5867691"|"5875233"|"587 5354"|"5887143"|"590576 8"|"5910991"|"5923869"|" 5923902"|"5946343"|"595 6025"|"5956088"|"596000 6"|"5984512"|"5987611"|" 5990884"|"5991307"|"599 9906"|"6009457"|"601837 6"|"6026150"|"6029196"|" 6031818"|"6032202"|"603 8614"|"6046550"|"606145 7"|"6078725"|"6081266"|" 6088063"|"6101195"|"610					

		8485"|"6108686"|"6122668"|"6127941"|"6128318"|"6148205"|"6157957"|"6163647"|"6169725"|"6175872"|"6181383"|"6185737"|"6195435"|"6195436"|"6199169"|"6212282"|"6246701"|"6253293"|"6255961"|"6256554"|"6269406"|"6301012"|"6308207"|"6310652"|"6313879"|"6321252"|"6324586"|"6332147"|"6343028"|"6349285"|"6349339"|"6351821"|"6353172"|"6356871"|"6404811"|"6418150"|"6430353"|"6442443"|"6449642"|"6449653"|"6456783"|"6463474"|"6466832"|"6469633"|"6487296"|"6493832"|"6522886"|"6526325"|"6535121"|"6587127"|"6598172"|"6604023"|"6611537"|"6631410"|"6636269"|"6653899"|"6654720"|"6654956"|"6658091"|"6674803"|"6684060"|"6687664"|"6704421"|"6741961"|"6757517"|"6763274"|"6778073"|"6778493"|"6778869"|"6803964"|"6809635"|"6816510"|"6816818"|"6823225"|"6826283"|"6836788"|"6839752"|"6859460"|"6859538"|"6873862"|"6882335"|"6889207"|"6898642"|"6901439"|"6907458"|"6912610"|"6915347"|"6916980"|"6917592"|"6919771"|"6920373"|"6931134"|"6931557"|"6934766"|"6937988"|"6970482"|"6985694"|"6987767"|"6987947"|"7007106"|"7020791"|"7043477"|"7043651"|"7046677"|"7047308"|"7054888"|"7058889"|"7068596"|"7072477"|"7092528"|"7092694"|"7096169"|"7113999"|"7115017"|"7120168"|"7130316"|"7130368"|"7130608"|"7130616").PN.				
N2536	280	("7136934"|"7139981"|"7143141"|"7143939"|"7146260"|"7158488"|"7161939"|"7162315"|"7171010"|"7185090"|"7187947"|"71971	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:32 AM

		48"|"7206367"|"7206618"| "7206967"|"7209795"|"72 18708"|"7236739"|"72367 73"|"7257398"|"7260616"| "7263110"|"7277547"|"72 86652"|"7289631"|"72930 60"|"7295548"|"7302468"| "7305694"|"7308188"|"73 10334"|"7312785"|"73135 93"|"7319764"|"7324857"| "7330875"|"7333519"|"73 46332"|"7356011"|"73590 06"|"7366206"|"7372846"| "7391791"|"7392102"|"73 92481"|"7400644"|"74124 99"|"7424267"|"7428310"| "7430181"|"7457948"|"74 72058"|"7474677"|"74835 38"|"7483540"|"7483958"| "7490044"|"7492912"|"75 05889"|"7509181"|"75191 88"|"7519667"|"7539551"| "7548744"|"7548851"|"75 58224"|"7558635"|"75619 32"|"7571014"|"7574274"| "7599685"|"7606174"|"76 26952"|"7627825"|"76305 00"|"7630501"|"7631119"| "7643894"|"7653344"|"76 57224"|"7657644"|"76579 10"|"7665115"|"7668990"| "7669113"|"7669219"|"76 72470"|"7675943"|"76760 44"|"7676142"|"7688306"| "7689304"|"7689305"|"77 02279"|"7702403"|"77109 41"|"7711774"|"7720096"| "7721032"|"7742740"|"77 42832"|"7743009"|"77469 06"|"7761176"|"7765315"| "7792311"|"7793206"|"78 04972"|"7805210"|"78179 60"|"7827259"|"7831054"| "7835689"|"7849181"|"78 53341"|"7865137"|"78822 34"|"7885622"|"7907819"| "7916877"|"7917082"|"79 33418"|"7934239"|"79456 36"|"7945708"|"7958441"| "7962482"|"7966388"|"79 87294"|"7995732"|"79965 66"|"7996588"|"8014423"| "8015306"|"8020023"|"80 23663"|"8028038"|"80283 23"|"8041062"|"8045721"| "8045952"|"8050203"|"80 50652"|"8054987"|"80553				

		64"|"8063698"|"8074253"| "8086287"|"8086752"|"80 90317"|"8103009"|"81111 32"|"8112032"|"8116476"| "8126172"|"8131389"|"81 31390"|"8135141"|"81397 74"|"8144883"|"8148622"| "8150079"|"8160281"|"81 69938"|"8170222"|"81702 60"|"8175292"|"8175297"| "8185674"|"8189824"|"81 94874"|"8204890"|"82086 53"|"8214447"|"8214740"| "8214873"|"8218790"|"82 29125"|"8230099"|"82330 29"|"8233632"|"8233635"| "8233648"|"8234395"|"82 38578"|"8239559"|"82397 48"|"8243961"|"8265310"| "8279709"|"8281001"|"82 85404"|"8290185"|"82906 03"|"8300845"|"8306235"| "8311226"|"8315555"|"83 16147"|"8325931"|"83259 35"|"8331585"|"8340330"| "8345709"|"8364295"|"83 70678"|"8374595"|"83915 01"|"8407623"|"8411883"| "8423659"|"8423893"|"84 32851"|"8433076"|"84422 39"|"8452020"|"8457334"| "8463184"|"8463875"|"84 73844"|"8477958"|"84838 53"|"8498726"|"8509211"| "8520870"|"8565455"|"85 77045"|"8577048"|"85884 32"|"8588949"|"8600075"| "8600084"|"8611559"|"86 15091"|"8620006"|"86398 30"|"8654995"|"8672744"| "8683009"|"8700730"|"87 31206"|"8750282"|"87510 26"|"8762565"|"8775546"| "8788080"|"8818538"|"88 19554"|"8843224"|"88432 28"|"8843586"|"8855319"| "8861739"|"8879761"|"88 85851"|"8886347"|"89040 66"|"8914559"|"8917877"| "8923997"|"8930006"|"89 34647"|"8934655"|"89422 52"|"8942395"|"8954177"| "8965544"|"8965546"|"89 66394"|"8977974"|"89844 42"|"9020153"|"9042556"| "9137602"|"9160965"|"91 95258"|"9219959"|"92260				

		73"|"9245514"|"9325286").PN.					
N2537	94	("9524098"|"D260764"|"D279779"|"D293671"|"D301037"|"D304443"|"D313023"|"D313398"|"D313600"|"D320598"|"D322609"|"D326450"|"D327060"|"D331388"|"D333135"|"D350531"|"D350962"|"D354059"|"D354751"|"D356093"|"D356312"|"D357024"|"D362446"|"D363933"|"D364877"|"D364878"|"D365102"|"D366044"|"D372716"|"D377651"|"D379816"|"D380752"|"D382271"|"D384940"|"D387352"|"D388792"|"D389143"|"D392641"|"D393628"|"D394659"|"D395889"|"D397996"|"D401587"|"D404741"|"D405071"|"D406847"|"D407071"|"D410927"|"D412337"|"D415496"|"D416021"|"D420006"|"D429246"|"D430143"|"D431552"|"D432525"|"D444475"|"D452520"|"D462339"|"D462340"|"D462945"|"D466108"|"D468297"|"D474763"|"D475993"|"D476643"|"D477310"|"D478051"|"D478069"|"D478896"|"D479520"|"D481056"|"D486145"|"D491925"|"D493148"|"D495333"|"D496003"|"D496005"|"D496335"|"D497363"|"D499086"|"D499395"|"D499718"|"D500015"|"D501477"|"D504872"|"D504885"|"D506463"|"D515072"|"D515557"|"D518475"|"D524296"|"D527375"|"RE41608").PN.	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:32 AM
N2538	200	("20010001160"|"20010009604"|"20010022823"|"20010027498"|"200100321888"|"20010042107"|"20010043456"|"20010046235"|"20010047377"|"20010050991"|"20020002039"|"20020002562"|"20020002565"|"20020003548"|"20020022453"|"20020026442"|"20020034374"|"200200428	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:32 AM

		44"|"20020049843"|"2002 0062406"|"20020065926"| "20020067909"|"2002007 2816"|"20020072817"|"20 020073228"|"2002007816 1"|"20020078293"|"20020 080783"|"20020090914"|" 20020093478"|"20020095 460"|"20020098878"|"200 20101357"|"20020103635 "|"20020109710"|"200201 12244"|"20020114354"|"2 0020114359"|"200201240 97"|"20020129156"|"2002 0131398"|"20020131761"| "20020136335"|"2002013 7505"|"20020143547"|"20 020143998"|"2002015005 3"|"20020159596"|"20020 163361"|"20020165721"|" 20020165921"|"20020168 938"|"20020173273"|"200 20177411"|"20020181355 "|"20020184310"|"200201 88762"|"20020194309"|"2 0020196951"|"200300026 09"|"20030002689"|"2003 0008616"|"20030014486"| "20030018797"|"2003002 0763"|"20030023741"|"20 030031333"|"2003003507 2"|"20030035444"|"20030 041173"|"20030041174"|" 20030043856"|"20030043 924"|"20030055892"|"200 30061428"|"20030063755 "|"20030066094"|"200300 67437"|"20030073432"|"2 0030091322"|"200300974 78"|"20030099212"|"2003 0099221"|"20030101253"| "20030103088"|"2003011 0329"|"20030126211"|"20 030135822"|"2003015795 1"|"20030161479"|"20030 167335"|"20030172123"|" 20030177889"|"20030179 780"|"20030185400"|"200 30195964"|"20030198254 "|"20030198255"|"200301 98257"|"20030200001"|"2 0030204273"|"200302045 09"|"20030210796"|"2003 0212802"|"20030219007"| "20030227478"|"2003022 9900"|"20030231208"|"20 030231871"|"2003023530				

		4"|"20040001106"|"20040001484"|"20040001591"|"20040008852"|"20040010727"|"20040012620"|"20040014426"|"20040015252"|"20040019497"|"20040019807"|"20040019911"|"20040023697"|"20040024478"|"20040024925"|"20040027166"|"20040032348"|"20040032421"|"20040037433"|"20040041836"|"20040042629"|"20040044742"|"20040048569"|"20040059842"|"20040059965"|"20040066736"|"20040071299"|"20040075767"|"20040078383"|"20040080671"|"20040093096"|"20040098754"|"20040111473"|"20040114771"|"20040117044"|"20040117462"|"20040128701"|"20040131192"|"20040133689"|"20040143368"|"20040143852"|"20040147224"|"20040148237"|"20040168081"|"20040170383"|"20040171346"|"20040177167"|"20040179554"|"20040183827"|"20040185773"|"20040203354"|"20040203378"|"20040203590"|"20040208158"|"20040213230"|"20040220687"|"20040223622"|"20040224638"|"20040225389"|"20040228367"|"20040248601"|"20040249490"|"20040249965"|"20040249982"|"20040252400"|"20040253969"|"20050002535"|"20050010691"|"20050011388"|"20050013394"|"20050015551"|"20050021470"|"20050021590"|"20050027821"|"20050031135"|"20050047605"|"20050058149"|"20050060435"|"20050062637"|"20050069153"|"20050081213"|"20050100174"|"20050105052"|"20050114538"|"20050120128"|"20050125222"|"20050125357"|"20050131558"|"20050144284"|"20050147261"|"20050154766").PN.				

N2539	76016	(700/94.ccls. 715/716.ccls. "381".clas.) ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:33 AM
N2540	391	N2539 and (N2534 N2535 N2536 N2537 N2538)	US-PGPUB; USPAT	OR	ON	ON	2019/06/07 08:33 AM
N2541	140	("5361381").URPN.	USPAT	OR	ON	ON	2019/06/07 08:35 AM
N2542	119	("6430353").URPN.	USPAT	OR	ON	ON	2019/06/07 08:38 AM
N2543	136	("6466832").URPN.	USPAT	OR	ON	ON	2019/06/07 08:43 AM
N2562	2056	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:56 PM
N2563	8825	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:56 PM
N2564	1489	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N2563	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:56 PM
N2565	6399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:56 PM
N2566	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:57 PM

		G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR				

		G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR					

		H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2567	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:57 PM
N2568	5861	N2566 and N2567	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:57 PM
N2569	123	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and N2568	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:57 PM
N2570	32	("2016/0070526").URPN.	USPAT	OR	ON	ON	2019/08/30 04:58 PM
N2571	13	("20020141599" | "20030005462" | "20040068744" | "20050282582" | "20070250845" | "20070256113" | "20080134278" | "20080196066" | "20080219223" |	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 04:59 PM

		"20100058407" | "6678362").PN. OR ("8528026").URPN.					
N2572	12	("8275307").URPN.	USPAT	OR	ON	ON	2019/08/30 05:00 PM
N2573	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:00 PM

		H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2574	6399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:00 PM
N2575	2462	second near3 play$5 near4 (media song title) and N2573	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:00 PM
N2576	605	N2574 and N2575	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:00 PM
N2577	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM

		G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2578	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM
N2579	316	N2578 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM
N2580	14184	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM
N2581	1846	(N2577 N2579) and N2580	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM
N2582	1156	(scene config$8 zone) same play$4 and N2581	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:01 PM
N2583	19	channel near3 map$6 same (smart intelligen$6 wireless$4 network$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:03 PM
N2584	102126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR					

		G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2585	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR					

		H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2586	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2587	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2588	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR				

		G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR				

		H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2589	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR					

		H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR				

		H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR					

		G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2590	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR					

		G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)				

N2591	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR				

		G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR				

		H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)						
N2592	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2593	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2594	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2595	102126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR				

		H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2596	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR				

		G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR				

		H04R3/04).CPC.)					
N2597	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2598	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

		H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR				

		G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR					

		G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2599	461851	N2584 N2585 N2586 N2587 N2588 N2589 N2590 N2591 N2592 N2593 N2594 N2595 N2596 N2597 N2598	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2600	377992	N2599 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM

N2601	19068	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2599	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2602	16949	N2600 and N2601	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2603	3143	N2602 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2604	1106	((G06F3/165 OR H03G3/20 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S7/30).CPC. and (700/94 381/107).CCLS.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2605	90	N2603 and N2604	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:06 PM
N2606	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:12 PM
N2607	102126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR					

		G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2608	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2609	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2610	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2611	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR				

		G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR				

		H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2612	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02					

		OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR				

		H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR					

		G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2613	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR				

		G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2614	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR				

		H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR				

		G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR				

		H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2615	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2616	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2617	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2618	102126	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301				

		OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2619	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR					

		G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2620	9226	704/500-502.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30

		700/94.ccls.					05:13 PM
N2621	289022	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR					

		G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR				

		H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2622	461851	N2607 N2608 N2609 N2610 N2611 N2612 N2613 N2614 N2615 N2616 N2617 N2618 N2619 N2620 N2621	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2623	377992	N2622 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2624	19068	(digital wireless network$6) near3 (playback adj device	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM

		$6speaker transducer) and N2622					
N2625	16949	N2623 and N2624	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2626	331	N2625 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4).ab. and pair$4	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:13 PM
N2627	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2628	316	N2627 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2629	159080	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM

		G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2630	6399	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2631	2462	second near3 play$5 near4 (media song title) and N2629	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2632	605	N2630 and N2631	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2633	519	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (N2627 N2628)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2634	33	N2632 and N2633	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2635	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2636	316	N2635 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM

N2637	23996	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2638	77	N2637 and (N2635 N2636)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:16 PM
N2639	8	("20090012995" | "20110085674" | "20110295446" | "20120130580" | "20150105934" | "6226336" | "7983811" | "8457323").PN. OR ("10397516").URPN.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:19 PM
N2640	10	("2009/0012995").URPN.	USPAT	OR	ON	ON	2019/08/30 05:21 PM
N2641	2056	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:22 PM
N2642	7558	(scene config$8 snap$shot network$4 zone) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:22 PM
N2643	162694	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:24 PM

		G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR				

		G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR				

		G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2644	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:24 PM
N2645	5861	N2643 and N2644	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:24 PM
N2646	2769	(output pair$5 channel surround$4 lfe) same config$8 and N2645	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:24 PM
N2647	2769	N2646	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:24 PM
N2648	79	N2646 and N2642	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:26 PM
N2649	207	("20020003548" | "20020124097" | "20050181348" | "20060095516" | "5808662" | "6757517" | "7218708" | "7293060" | "7668990" | "7669219").PN. OR ("8290603").URPN.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:27 PM
N2650	840907	(output pair$5 channel surround$4) with (zone scene snapshot config$8).clm,ab.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:27 PM
N2651	222192	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:27 PM
N2652	3555	N2650 and N2651 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:27 PM

N2653	1081	N2652 AND ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04 OR H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:27 PM
N2654	133	("2006/0095516").URPN.	USPAT	OR	ON	ON	2019/08/30 05:28 PM
N2655	0	"383565".ap. and lamborne	USPAT	OR	ON	ON	2019/08/30 05:33 PM
N2656	0	"383565".ap. and lambourne	USPAT	OR	ON	ON	2019/08/30 05:33 PM
N2657	0	"383565".ap. and sonos	USPAT	OR	ON	ON	2019/08/30 05:33 PM
N2658	9	"383565".ap.	USPAT	OR	ON	ON	2019/08/30 05:33 PM
N2659	1	"383565".ap. and lambourne	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:34 PM
N2660	82828	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:34 PM
N2661	1	"383561".ap. and lambourne	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:38 PM
N2662	82828	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:38 PM

		H04R3/12).CPC.)					
N2663	10308	N2662 and N2650	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:39 PM
N2664	831	N2662 and N2650 and N2624	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:39 PM
N2665	6	("2013/0096926").URPN.	USPAT	OR	ON	ON	2019/08/30 05:42 PM
N2666	200	("20050159833"|"20050160270"|"20050166135"|"20050168630"|"20050177256"|"20050177643"|"20050181348"|"20050195205"|"20050195823"|"20050197725"|"20050198574"|"20050201549"|"20050216556"|"20050254505"|"20050262217"|"20050266798"|"20050266826"|"20050281255"|"20050283820"|"20050288805"|"20050289224"|"20050289244"|"20060041616"|"20060041639"|"20060045281"|"20060072489"|"20060095516"|"20060098936"|"20060119497"|"20060143236"|"20060149402"|"20060155721"|"20060173844"|"20060179160"|"20060193454"|"20060193482"|"20060199538"|"20060205349"|"20060222186"|"20060227985"|"20060229752"|"20060259649"|"20060270395"|"20060294569"|"20070003067"|"20070003075"|"20070022207"|"20070038999"|"20070043847"|"20070047712"|"20070048713"|"20070054680"|"20070071255"|"20070087686"|"20070142022"|"20070142944"|"20070143493"|"20070169115"|"20070180137"|"20070189544"|"20070192156"|"20070206829"|"20070223725"|"20070249295"|"20070265031"|"20070271388"|"20070288610"|"20070299778"|"20080002836"|"20080007649"|"20080007650"|"20080007651"|"20080018785"|"20080022320"|"200	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:43 PM

		80025535"|"20080045140 "|"20080065232"|"200800 66094"|"20080066120"|"2 0080072816"|"200800752 95"|"20080077261"|"2008 0077619"|"20080077620"| "20080086318"|"2008009 1771"|"20080092204"|"20 080120429"|"2008012694 3"|"20080144861"|"20080 144864"|"20080146289"|" 20080152165"|"20080159 545"|"20080162668"|"200 80189272"|"20080205070 "|"20080212786"|"200802 15169"|"20080242222"|"2 0080247554"|"200802630 10"|"20080291863"|"2008 0303947"|"20090011798"| "20090017868"|"2009003 1336"|"20090060219"|"20 090070434"|"2009008932 7"|"20090097672"|"20090 100189"|"20090124289"|" 20090157905"|"20090164 655"|"20090169030"|"200 90180632"|"20090193345 "|"20090222115"|"200902 28919"|"20090232326"|"2 0090251604"|"201000049 83"|"20100010651"|"2010 0031366"|"20100049835"| "20100052843"|"2010006 7716"|"20100087089"|"20 100142735"|"2010015309 7"|"20100228740"|"20100 272270"|"20100284389"|" 20100290643"|"20100299 639"|"20110001632"|"201 10002487"|"20110044476 "|"20110066943"|"201101 10533"|"20110170710"|"2 0110228944"|"201102996 96"|"20110316768"|"2012 0029671"|"20120030366"| "20120047435"|"2012005 1558"|"20120051567"|"20 120060046"|"2012012783 1"|"20120129446"|"20120 148075"|"20120185771"|" 20120192071"|"20120207 290"|"20120237054"|"201 20263325"|"20120281058 "|"20120290621"|"201300 10970"|"20130018960"|"2 0130028443"|"201300314 75"|"20130038726"|"2013				

		0041954"|"20130047084"|"20130051572"|"20130052940"|"20130070093"|"20130080599"|"201300946700"|"20130124664"|"20130129122"|"20130132837"|"20130159126"|"20130167029"|"20130174100"|"20130174223"|"20130179163"|"20130191454"|"20130197682"|"20130208911"|"20130208921"|"20130226323"|"20130230175"|"20130232416"|"20130236029"|"20130243199"|"20130253679"|"20130253934"|"20130259254"|"20130279706"|"20130287186"|"20130290504"|"20130293345"|"20140006483"|"20140016784"|"20140016786").PN.				
N2667	261	("20140016802"|"20140023196"|"20140037097"|"20140064501"|"20140075308"|"20140075311"|"20140079242"|"20140108929"|"20140112481"|"20140123005"|"20140140530"|"20140161265"|"20140181569"|"20140219456"|"20140226823"|"20140242913"|"20140256260"|"20140267148"|"20140270202"|"20140273859"|"20140279889"|"20140285313"|"20140286496"|"20140294200"|"20140298174"|"20140323036"|"20140344689"|"20140355768"|"20140355794"|"20140378056"|"20150019670"|"20150026613"|"20150032844"|"20150043736"|"20150049248"|"20150063610"|"20150074527"|"20150074528"|"20150098576"|"20150139210"|"20150146886"|"20150201274"|"20150256954"|"20150281866"|"20150286360"|"20150304288"|"20150365987"|"20170188152"|"3956591"|"4105974"|"4296278"|"4306114"|"4382158"|"4509211"|"4530091"|"4696037"|"4701629"|"4712105"|"4731814"|"4816989"|"48	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:43 PM

		24059"|"4845751"|"49949 08"|"4995778"|"5086385"| "5151922"|"5153579"|"51 82552"|"5185680"|"52373 27"|"5239458"|"5272757"| "5299266"|"5361381"|"53 72441"|"5406634"|"54304 85"|"5440644"|"5457448"| "5467342"|"5481251"|"54 91839"|"5515345"|"55196 41"|"5533021"|"5553147"| "5553222"|"5553314"|"55 96696"|"5602992"|"56234 83"|"5625350"|"5640388"| "5652749"|"5661665"|"56 68884"|"5673323"|"56968 96"|"5726989"|"5740235"| "5742623"|"5751819"|"57 61320"|"5774016"|"57872 49"|"5790543"|"5808662"| "5812201"|"5815689"|"58 18948"|"5832024"|"58481 52"|"5852722"|"5867691"| "5875233"|"5875354"|"58 87143"|"5905768"|"59109 91"|"5923869"|"5923902"| "5946343"|"5956025"|"59 56088"|"5960006"|"59845 12"|"5987611"|"5990884"| "5991307"|"5999906"|"60 09457"|"6018376"|"60261 50"|"6029196"|"6031818"| "6032202"|"6038614"|"60 46550"|"6061457"|"60787 25"|"6081266"|"6088063"| "6101195"|"6108485"|"61 08686"|"6122668"|"61279 41"|"6128318"|"6148205"| "6157957"|"6163647"|"61 69725"|"6175872"|"61813 83"|"6185737"|"6195435"| "6195436"|"6199169"|"62 12282"|"6246701"|"62532 93"|"6255961"|"6256554"| "6269406"|"6301012"|"63 08207"|"6310652"|"63138 79"|"6321252"|"6324586"| "6332147"|"6343028"|"63 49285"|"6349339"|"63518 21"|"6353172"|"6356871"| "6404811"|"6418150"|"64 30353"|"6442443"|"64496 42"|"6449653"|"6456783"| "6463474"|"6466832"|"64 69633"|"6487296"|"64938 32"|"6522886"|"6526325"| "6535121"|"6587127"|"65				

		98172"|"6604023"|"6611537"|"6631410"|"6636269"|"6653899"|"6654720"|"6654956"|"6658091"|"6674803"|"6684060"|"6687664"|"6704421"|"6741961"|"6757517"|"6763274"|"6778073"|"6778493"|"6778869"|"6803964"|"6809635"|"6816510"|"6816818"|"6823225"|"6826283"|"6836788"|"6839752"|"6859460"|"6859538"|"6873862"|"6882335"|"6889207"|"6898642"|"6901439"|"6907458"|"6912610"|"6915347"|"6916980"|"6917592"|"6919771"|"6920373"|"6931134"|"6931557"|"6934766"|"6937988"|"6970482"|"6985694"|"6987767"|"6987947"|"7007106"|"7020791"|"7043477"|"7043651"|"7046677"|"7047308"|"7054888"|"7058889"|"7068596"|"7072477"|"7092528"|"7092694"|"7096169"|"7113999"|"7115017"|"7120168"|"7130316"|"7130368"|"7130608").PN.					
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		81"|"7519188"|"7519667"| "7539551"|"7548744"|"75 48851"|"7558224"|"75586 35"|"7561932"|"7571014"| "7574274"|"7599685"|"76 06174"|"7626952"|"76278 25"|"7630500"|"7630501"| "7631119"|"7643894"|"76 53344"|"7657224"|"76576 44"|"7657910"|"7665115"| "7668990"|"7669113"|"76 69219"|"7672470"|"76759 43"|"7676044"|"7676142"| "7688306"|"7689304"|"76 89305"|"7702279"|"77024 03"|"7710941"|"7711774"| "7720096"|"7721032"|"77 42740"|"7742832"|"77430 09"|"7746906"|"7761176"| "7765315"|"7792311"|"77 93206"|"7804972"|"78052 10"|"7817960"|"7827259"| "7831054"|"7835689"|"78 49181"|"7853341"|"78651 37"|"7882234"|"7885622"| "7907819"|"7916877"|"79 17082"|"7933418"|"79342 39"|"7945636"|"7945708"| "7958441"|"7962482"|"79 66388"|"7987294"|"79957 32"|"7996566"|"7996588"| "8014423"|"8015306"|"80 20023"|"8023663"|"80280 38"|"8028323"|"8041062"| "8045721"|"8045952"|"80 50203"|"8050652"|"80549 87"|"8055364"|"8063698"| "8074253"|"8086287"|"80 86752"|"8090317"|"81030 09"|"8111132"|"8112032"| "8116476"|"8126172"|"81 31389"|"8131390"|"81351 41"|"8139774"|"8144883"| "8148622"|"8150079"|"81 60281"|"8169938"|"81702 22"|"8170260"|"8175292"| "8175297"|"8185674"|"81 89824"|"8194874"|"82048 90"|"8208653"|"8214447"| "8214740"|"8214873"|"82 18790"|"8229125"|"82300 99"|"8233029"|"8233632"| "8233635"|"8233648"|"82 34395"|"8238578"|"82395 59"|"8239748"|"8243961"| "8265310"|"8279709"|"82 81001"|"8285404"|"82901				

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		4659"|"D395889"|"D397996"|"D401587"|"D404741"|"D405071"|"D406847"|"D407071"|"D410927"|"D412337"|"D415496"|"D416021"|"D420006"|"D429246"|"D430143"|"D431552"|"D432525"|"D444475"|"D452520"|"D462339"|"D462340"|"D462945"|"D466108"|"D468297"|"D474763"|"D475993"|"D476643"|"D477310"|"D478051"|"D478069"|"D478896"|"D479520"|"D481056"|"D486145"|"D491925"|"D493148"|"D495333"|"D496003"|"D496005"|"D496335"|"D497363"|"D499086"|"D499395"|"D499718"|"D500015"|"D501477"|"D504872"|"D504885"|"D506463"|"D515072"|"D515557"|"D518475"|"D524296"|"D527375"|"RE41608").PN.					
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N2672	1036	N2666 N2667 N2668 N2669 N2670 N2671	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:44 PM
N2673	202	N2672 and N2662	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:44 PM
N2674	24	N2664 and N2673	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:44 PM

N2675	1009	N2664 N2673	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:44 PM
N2676	519	(zone scene config$9 snapshot schem$3).clm,ab. and play$5 with (song media content music) and (sync synchron$8).clm,ab. and (N2627 N2628)	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:46 PM
N2677	5	N2675 and N2676	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:46 PM
N2678	1	("2016/0196851").URPN.	USPAT	OR	ON	ON	2019/08/30 05:47 PM
N2679	14	("2015/0092947").URPN.	USPAT	OR	ON	ON	2019/08/30 05:48 PM
N2680	21	("20070223725" | "20080008338" | "20090079883" | "20100260348" | "20100299639" | "20110026717" | "20120058727" | "20130089217" | "20130331970" | "20130336504" | "20140057569" | "20140079256" | "20140219484" | "20140337426" | "20150055781" | "20150092947" | "7483538" | "8554133" | "8788080" | "8873767" | "9715365").PN. OR ("10284934").URPN.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:49 PM
N2681	339	automat$6 near6 channel near3 (config$8 set$4 map$6) and (smart intelligen$6 wireless$4 network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:51 PM
N2682	361	automat$6 near6 channel near3 (config$8 zone scene snapshot area set$4 map$6) and (smart intelligen$6 wireless$4	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:51 PM

		network$4 speaker transducer loud$5speaker playback near2 devic$6 speaker play$4) near3 $6speaker					
N2683	20	("20040261099" | "20050195998" | "20060174312" | "20070094691" | "20080109207" | "20090216706" | "20100060549" | "20100265397" | "20160037189" | "20160080445" | "20160196851" | "5610653" | "6337716" | "6446261" | "8594743" | "9094564" | "9338391" | "9396182" | "9398322" | "9542490").PN. OR ("10362346").URPN.	US-PGPUB; USPAT	OR	ON	ON	2019/08/30 05:59 PM
N2685	17	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:12 AM
N2686	10	(output pair$5 channel surround$4) with config$8 and network$6 near5 $6speak$6 and N2685	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:12 AM
N2687	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:14 AM

		G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR					

		G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR				

		H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2688	1375	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N2687	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:14 AM
N2689	1375	N2688	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:14 AM
N2690	2104	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:15 AM
N2691	2104	N2690	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:15 AM
N2692	2054	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) AND GROUP$5	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:18 AM
N2693	2001	N2692 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:18 AM
N2694	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:22 AM

		line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N2695	2966	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:22 AM
N2696	160421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM

		H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2697	2489	second near3 play$5 near4 (media song title) and N2696	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2698	2489	N2697	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2699	2104	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2700	2104	N2699	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2701	17	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2702	17	N2701	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:26 AM
N2703	24444	(output pair$5 channel surround$4) with (set$6 config$8 map$5) and network$6 near5 $6speak$6	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:28 AM
N2704	24444	N2703	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:28 AM
N2705	6507	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:28 AM
N2706	30	(scene config$6 zone network$4) with play$4 and play$5 with different near3 (song media	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:28 AM

		content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N2707	160421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM

		H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2708	6507	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2709	2489	second near3 play$5 near4 (media song title) and N2707	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2710	619	N2708 and N2709	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2711	5245	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2712	316	N2711 and (700/94.ccls. 704/500-502.ccls. 715/716,727.ccls. 381/104-109.ccls.)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2713	6	N2712 and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:30 AM
N2714	103467	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				

N2715	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR					

		H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2716	160421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		G06F17/30749 OR G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2717	160421	((G11B27/105 OR G11B2220/61 OR G11B27/034 OR G11B27/10 OR G11B27/34 OR G11B2020/00057 OR G11B2020/10546 OR G11B2220/60 OR G11B27/36 OR G11B19/025 OR G11B2220/218 OR G11B2220/2545 OR G11B2220/2562 OR G11B2220/90 OR G11B27/28 OR G11B27/329 OR G06F17/30772 OR G06F17/30749 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		G06F17/30743 OR G06F1/1616 OR G06F1/1626 OR G06F1/1632 OR G06F1/266 OR G06F3/0362 OR G06F17/30029 OR G06F17/30038 OR G06F17/30056 OR G06F17/30058 OR G06F17/30758 OR G06F17/30761 OR G06F17/30861 OR G06F3/017 OR G06F3/16 OR G06F3/162 OR G10H1/0058 OR G10H2240/081 OR G10H2240/085 OR G10H2240/105 OR G10H2240/125 OR G10H2240/251 OR G11C2207/16 OR G11C7/20 OR H04H20/106 OR H04H20/30 OR H04H60/46 OR H04H60/47 OR H04H60/73 OR H04H60/74 OR H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)					
N2718	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR				

		G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR				

		H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2719	292947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR				

		G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR					

		H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR				

		H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2720	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR					

		H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2721	292947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR					

		H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR				

		G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR				

		H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2722	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2723	5245	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2724	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2725	103467	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR G10L19/005 OR G10L19/02 OR G10L19/0212 OR G10L19/022 OR G10L19/032 OR G10L19/04 OR G10L19/06 OR G10L19/12 OR G10L19/167 OR G10L17/005 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		G10L19/0018 OR G10L19/16 OR G10L21/00 OR G10L15/265 OR G10L19/173 OR G10L19/20 OR G10L2021/02082 OR G10L25/69 OR H04R5/04 OR H04R2499/13 OR H04R3/12 OR H04R2420/05 OR H04R2499/15 OR H04R27/00 OR H04R3/00 OR H04R3/14 OR H04R5/02 OR H04R1/403 OR H04R2205/022 OR H04R2499/11 OR H04R1/1091 OR H04R1/30 OR H04R1/345 OR H04R2201/103 OR H04R2201/403 OR H04R2203/12 OR H04R2205/021 OR H04R2225/55 OR H04R2227/003 OR H04R2227/005 OR H04R2420/07 OR H04R2430/25 OR H04R25/554 OR H04R29/001 OR H04R29/002 OR H04R29/004 OR H04R29/007 OR H04R3/02 OR H04R5/023 OR H04R5/033 OR H04S1/007 OR H04S3/008 OR H04S7/40 OR H04S2420/13 OR H04S2420/03 OR H04S3/00 OR H04S1/00 OR H04S7/00 OR H04S7/307 OR H04S1/002 OR H04S2400/01 OR H04S2400/11 OR H04S2400/15 OR H04S2420/01 OR H04S3/002 OR H04S3/02 OR H04S5/005 OR H04S7/30 OR H04S7/301 OR H04S7/302 OR H04S7/305 OR H04S7/308 OR G06F1/3287 OR G06F3/16 OR G06F1/1616 OR G06F1/165 OR					

		G06F1/1671 OR G06F1/1688 OR G06F1/3203 OR G06F9/5072 OR G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)					
N2726	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR					

		H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2727	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2728	292947	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM

		H04S2420/13 OR H04S3/00 OR H04S2400/13 OR H04S2400/15 OR H04S3/008 OR H04S7/305 OR H04S1/002 OR H04S2400/03 OR H04S2420/11 OR H04S7/00 OR H04S7/303 OR H04S1/00 OR H04S1/005 OR H04S2400/05 OR H04S2400/07 OR H04S2420/05 OR H04S3/004 OR H04S3/006 OR H04S5/00 OR H04S5/005 OR H04S5/02 OR H04S7/301 OR H04S7/307 OR H04S7/308 OR H04R5/02 OR H04R25/554 OR H04R3/12 OR H04R3/04 OR H04R2499/13 OR H04R25/606 OR H04R5/04 OR H04R2499/11 OR H04R25/505 OR H04R27/00 OR H04R3/00 OR H04R5/00 OR H04R2430/03 OR H04R29/00 OR H04R29/001 OR H04R1/02 OR H04R1/323 OR H04R1/403 OR H04R2225/43 OR H04R2420/07 OR H04R2460/03 OR H04R2499/15 OR H04R25/552 OR H04R5/033 OR H04R1/10 OR H04R2205/022 OR H04R2217/03 OR H04R2420/09 OR H04R2430/01 OR H04R25/356 OR H04R25/407 OR H04R25/453 OR H04R25/50 OR H04R25/70 OR H04R3/005 OR H04R1/1008 OR H04R1/1083 OR H04R1/265 OR H04R2201/401 OR H04R2201/403 OR H04R2203/12 OR					

		H04R2205/021 OR H04R2205/024 OR H04R2225/31 OR H04R2225/39 OR H04R2225/51 OR H04R2225/63 OR H04R2225/67 OR H04R2227/003 OR H04R2227/005 OR H04R23/008 OR H04R2420/01 OR H04R2420/03 OR H04R2460/01 OR H04R2460/13 OR H04R25/00 OR H04R25/305 OR H04R25/353 OR H04R25/405 OR H04R25/658 OR H04R27/02 OR H04R29/004 OR H04R29/007 OR H04R3/002 OR H04R3/007 OR H04R3/02 OR H04R5/023 OR H04R7/04 OR H04R9/025 OR H04R9/06 OR G10L15/22 OR G10L21/02 OR G10L21/0208 OR G10L15/20 OR G10L15/265 OR G10L2021/02082 OR G10L15/187 OR G10L15/24 OR G10L17/00 OR G10L19/02 OR G10L2015/227 OR G10L25/63 OR G10L13/02 OR G10L13/033 OR G10L13/043 OR G10L13/08 OR G10L15/00 OR G10L15/005 OR G10L15/02 OR G10L15/04 OR G10L15/08 OR G10L15/26 OR G10L15/32 OR G10L17/04 OR G10L17/08 OR G10L19/00 OR G10L19/008 OR G10L19/0204 OR G10L19/0212 OR G10L19/26 OR				

		G10L2015/221 OR G10L2015/223 OR G10L2015/226 OR G10L2021/02165 OR G10L2021/02166 OR G10L21/00 OR G10L21/0216 OR G10L21/0232 OR G10L25/18 OR G10L25/27 OR G10L25/48 OR G10L25/75 OR G10L25/78 OR H04M1/72527 OR H04M2250/74 OR H04M3/56 OR H04M19/04 OR H04M1/605 OR H04M1/6066 OR H04M2250/58 OR H04M1/02 OR H04M1/0225 OR H04M1/0241 OR H04M1/026 OR H04M1/03 OR H04M1/24 OR H04M1/247 OR H04M1/60 OR H04M1/6016 OR H04M1/6033 OR H04M1/6058 OR H04M1/72519 OR H04M1/72544 OR H04M1/72552 OR H04M1/72572 OR H04M1/72575 OR H04M2203/2061 OR H04M2203/255 OR H04M2203/30 OR H04M2250/10 OR H04M2250/12 OR H04M3/42 OR H04M3/42221 OR H04M3/4936 OR H04M3/568 OR H04M9/082 OR G10K11/002 OR G10K11/16 OR G10K15/08 OR H04N21/439 OR H04N21/4223 OR H04N21/44008 OR H04N21/2143 OR H04N21/4126 OR H04N21/4131 OR H04N21/42222 OR H04N21/43635 OR H04N21/44 OR				

		H04N21/44218 OR H04N21/482 OR H04N21/485 OR H04N5/144 OR H04N5/23296 OR H04N5/4403 OR H04N5/607 OR H04N5/642 OR H04N7/15 OR H04N9/87 OR H03G3/3005 OR H03G1/04 OR H03G3/301 OR H03G5/165 OR H03G7/08 OR G06F17/241 OR G06F17/27 OR G06F17/2785 OR G06F17/28 OR G06F17/289 OR G06F17/30026 OR G06F17/30743 OR G06F17/30979 OR G06F1/266 OR G06F1/3287 OR G06F3/017 OR H04B3/237 OR H04L12/5815 OR H04L12/5835 OR H04L51/043 OR H04L51/066 OR H04W12/02 OR H04W12/06 OR H04W4/02 OR H04W4/10 OR H04W4/18 OR H04W76/005 OR H04W76/04 OR H04W8/22).CPC.)					
N2729	466723	N2714 N2715 N2716 N2717 N2718 N2719 N2720 N2721 N2722 N2723 N2724 N2725 N2726 N2727 N2728	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2730	63006	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2731	41223	N2729 and N2730	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:32 AM
N2732	164309	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR G10L19/00 OR G10L19/005 OR G10L19/0212 OR	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM

		G10L19/04 OR G10L19/0017 OR G10L19/12 OR G10L19/022 OR G10L19/032 OR G10L19/06 OR G10L21/038 OR G10L19/0204 OR G10L19/173 OR G10L19/26 OR G10L19/018 OR G10L19/0208 OR G10L19/025 OR G10L19/20 OR G10L19/265 OR G10L25/78 OR G10L15/04 OR G10L15/18 OR G10L15/20 OR G10L15/22 OR G10L15/265 OR G10L17/26 OR G10L19/0019 OR G10L19/03 OR G10L19/038 OR G10L19/08 OR G10L19/10 OR G10L19/113 OR G10L19/18 OR G10L19/22 OR G10L2015/223 OR G10L2025/786 OR G10L21/00 OR G10L21/02 OR G10L21/0208 OR G10L21/0264 OR G10L25/12 OR G10L25/18 OR H04S2420/03 OR H04S3/008 OR H04S1/007 OR H04S1/002 OR H04S3/02 OR H04S2400/01 OR H04S3/002 OR H04S3/004 OR H04S7/30 OR H04S7/307 OR H04S1/005 OR H04S2400/11 OR H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527 OR G11B27/105 OR G11B2020/00057 OR G11B20/00007 OR				

		G11B2020/00014 OR G11B2020/00043 OR G11B2020/10759 OR G11B20/10 OR G11B2020/00028 OR G11B2020/10574 OR G11B2020/10592 OR G11B2020/10601 OR G11B2020/10675 OR G11B2020/1288 OR G11B20/00086 OR G11B20/0021 OR G11B20/00282 OR G11B20/00347 OR G11B20/00992 OR G11B2220/2537 OR G11B2220/2545 OR G11B2220/61 OR G11B27/005 OR G11B27/034 OR G11B27/038 OR G11B27/11 OR G11B27/28 OR G11B27/3027 OR G11B27/326 OR G06F3/16 OR G06F3/162 OR G06F17/30743 OR G06F15/167 OR G06F17/30758 OR G06F17/30775 OR G06F1/3287 OR G06F1/3293 OR G06F9/30014 OR G06F9/3012 OR G06F9/3877 OR G06F9/3897 OR G06F9/441 OR H03G7/007 OR H03G5/165 OR H03G9/005 OR H04H60/27 OR H04H60/58 OR H04H20/14 OR H04H20/31 OR H04H20/426 OR H04H20/61 OR H04H20/88 OR H04H20/95 OR H04H40/36 OR H04H60/37 OR H04H60/72 OR H04L65/607 OR H04L25/03159 OR H04N21/8113 OR H04N19/00096 OR H04N19/00484 OR H04N19/00775 OR					

		H04N19/00781 OR H04N21/2407 OR H04N21/4126 OR H04N21/439 OR H04N21/443 OR H04N21/4437 OR H04N21/478 OR H04N21/8193 OR H04N7/26058 OR H04N7/26127 OR H04N7/26186 OR H04N7/26292 OR H04N7/26882 OR G10H1/0041 OR G10H2210/046 OR G10H2210/381 OR G10H2250/581 OR G10H2250/595 OR G10H7/12 OR H04M19/04 OR H04M1/72522 OR H04M1/72527 OR H04M3/432 OR H04M3/487 OR H04M3/56 OR H04M3/568 OR H04R2225/43 OR H04R2225/55 OR H04R25/356 OR H04R25/552 OR H04R25/554 OR H04R3/04).CPC.)					
N2733	8139	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and N2732	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM
N2734	26466	(zone scene config$9) with play$4 and N2732	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM
N2735	2924	N2733 and N2734	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM
N2736	2926	(zone scene config$9) with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N2732	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM
N2737	2926	N2736	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:33 AM
N2738	30	(scene config$6 zone network$4) with play$4	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:37 AM

		and play$5 with different near3 (song media content) and (sync synchron$8) and (line$3in line$3input$4 line near3 (in input input$4)) near5 (smart intelligent sens$6 determin$6)					
N2739	1375	zone with play$4 and play$5 with different near3 (song media content) and (sync synchron$8) and N2687	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:37 AM
N2740	4	"067747".ap. and clock$4	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:40 AM
N2741	2	"20160357504"	US-PGPUB; USPAT	OR	ON	ON	2019/10/14 09:41 AM
N2742	13214	((G06F3/165 G06F3/16 G06F3/162).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:36 PM
N2743	832	(zone scene config$9 snapshot schem$3).clm,ab. AND play$5 WITH (song media content music) AND (sync synchron$8).clm,ab. AND 2742	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:37 PM
N2744	4054	((h03g1/02 H03G3/20 OR H03G3/3005 OR H03G5/165 H03G5/16).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:39 PM
N2745	199	(zone scene config$9 snapshot schem$3).clm,ab. AND play$5 WITH (song media content music) AND (sync synchron$8).clm,ab. AND 2744	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:40 PM
N2746	594	2744 AND 2742	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:40 PM
N2747	16190	((H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:42 PM

N2748	2590	((H04R2227/003 OR H04R2227/005 OR H04R2420/01 OR H04R2420/07 OR H04R27/00 OR H04R3/12 OR H04R5/04).CPC.) AND 2742	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:42 PM
N2749	437	(zone scene config$9 snapshot schem$3).clm,ab. AND play$5 WITH (song media content music) AND (sync synchron$8).clm,ab. AND 2748	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:42 PM
N2750	33	(zone scene config$9 snapshot schem$3).clm,ab. AND play$5 WITH (song media content music) AND (sync synchron$8).clm,ab. AND 2748 AND ((H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:43 PM
N2751	4005	((H04S2400/01 OR H04S7/30).CPC.)	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:43 PM
N2752	881	2750 2749 2746	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 03:43 PM
N2753	29	(zone scene config$9 snapshot schem$3).clm,ab. AND play$5 WITH (song media content music) AND (sync synchron$8).clm,ab. AND 2748 AND 700/94.ccls.	US-PGPUB; USPAT	OR	ON	ON	2021/01/07 04:58 PM

UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 12/17/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
12/17/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Decision Granting Request for Prioritized Examination (Track I)	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.	
	Examiner BRIAN W BROWN	**Art Unit** OPET	**AIA (FITF) Status** No

1. THE REQUEST FILED 15 December 2020 IS **GRANTED** .

The above-identified application has met the requirements for prioritized examination

A. ☐ for an original nonprovisional application (Track I).
B. ☑ for an application undergoing continued examination (RCE).

2. **The above-identified application will undergo prioritized examination**. The application will be accorded special status throughout its entire course of prosecution until one of the following occurs:

A. filing a **petition for extension of time** to extend the time period for filing a reply;

B. filing an **amendment to amend the application to contain more than four independent claims, more than thirty total claims** , or a multiple dependent claim;

C. filing a **request for continued examination** ;

D. filing a notice of appeal;

E. filing a request for suspension of action;

F. mailing of a notice of allowance;

G. mailing of a final Office action;

H. completion of examination as defined in 37 CFR 41.102; or

I. abandonment of the application.

Telephone inquiries with regard to this decision should be directed to BRIAN BROWN at (571)272-5338. In his/her absence, calls may be directed to Petition Help Desk at (571) 272-3282.

/BRIAN W BROWN/ Petitions Examiner, OPET	

U.S. Patent and Trademark Office
PTO-2298 (Rev. 02-2012)

Doc Code: TRACK1.REQ
Document Description: TrackOne Request

PTO/AIA/424 (04-14)

CERTIFICATION AND REQUEST FOR PRIORITIZED EXAMINATION UNDER 37 CFR 1.102(e) (Page 1 of 1)

First Named Inventor:	Kallai	Nonprovisional Application Number (if known):	16/670,109
Title of Invention:	Playback Device Pairing		

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS PRIORITIZED EXAMINATION FOR THE ABOVE-IDENTIFIED APPLICATION.

1. The processing fee set forth in 37 CFR 1.17(i)(1) and the prioritized examination fee set forth in 37 CFR 1.17(c) have been filed with the request. The publication fee requirement is met because that fee, set forth in 37 CFR 1.18(d), is currently $0. The basic filing fee, search fee, and examination fee are filed with the request or have been already been paid. I understand that any required excess claims fees or application size fee must be paid for the application.

2. I understand that the application may not contain, or be amended to contain, more than four independent claims, more than thirty total claims, or any multiple dependent claims, and that any request for an extension of time will cause an outstanding Track I request to be dismissed.

3. The applicable box is checked below:

I. ☐ **Original Application (Track One) - Prioritized Examination under § 1.102(e)(1)**

i. (a) The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a). This certification and request is being filed with the utility application via EFS-Web.

---OR---

(b) The application is an original nonprovisional plant application filed under 35 U.S.C. 111(a). This certification and request is being filed with the plant application in paper.

ii. An executed inventor's oath or declaration under 37 CFR 1.63 or 37 CFR 1.64 for each inventor, or the application data sheet meeting the conditions specified in 37 CFR 1.53(f)(3)(i) is filed with the application.

II. ☑ **Request for Continued Examination - Prioritized Examination under § 1.102(e)(2)**

i. A request for continued examination has been filed with, or prior to, this form.
ii. If the application is a utility application, this certification and request is being filed via EFS-Web.
iii. The application is an original nonprovisional utility application filed under 35 U.S.C. 111(a), or is a national stage entry under 35 U.S.C. 371.
iv. This certification and request is being filed prior to the mailing of a first Office action responsive to the request for continued examination.
v. No prior request for continued examination has been granted prioritized examination status under 37 CFR 1.102(e)(2).

Signature /Jeffrey P. Armstrong/	Date December 15, 2020
Name (Print/Typed) Jeffrey P. Armstrong	Practitioner Registration Number 54,967

*Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required.**

☐ *Total of _____ forms are submitted.

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	16670109	Filing Date	2019-10-31	Docket Number (if applicable)	11-0401-CON1019A	Art Unit	2654
First Named Inventor	Kallai			Examiner Name	McCord		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☒ Other Response After Final Action filed on December 4, 2020

☒ Enclosed

☐ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☒ Other Certification and Request for Prioritized Examination under 37 CFR 1.102(e)

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 132490

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2020-12-15
Name	Jeffrey P. Armstrong	Registration Number	54967

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
REQUEST FOR PRIORITIZED EXAMINATION	1817	1	4200	4200
Pages:				
Claims:				
Miscellaneous-Filing:				
PUBL. FEE- EARLY, VOLUNTARY, OR NORMAL	1504	1	0	0
PROCESSING FEE, EXCEPT PROV. APPLS.	1830	1	140	140
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	1820	1	2000	2000
		Total in USD ($)		**6340**

Electronic Acknowledgement Receipt	
EFS ID:	41390367
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	15-DEC-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:25:26
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$6340
RAM confirmation Number	E2020BEE25539964
Deposit Account	132490
Authorized User	Jeffrey Armstrong
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	TrackOne Request	11-0401-CON1019A_Track_One_Request.pdf	116869 c6fb5fc4fb134e9fbd2ba8575536a32163e0d663	no	1
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	11-0401-CON1019A_RCE.pdf	76897 31bd62202efe7badb4e38728c4a49fcd25c7d702	no	2
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	37763 d1680e548c69512951e38e95d1087d0c990f3ae5	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	231529		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 12/10/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
12/10/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.	
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (FITF) Status** No

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 04 December 2020 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

NO NOTICE OF APPEAL FILED

1. ☑ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:
   a) ☐ The period for reply expires ____ months from the mailing date of the final rejection.
   b) ☑ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
   c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection.The current period for reply expires ____ months from the mailing date of *the prior Advisory Action* or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.
   Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANTS FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37CFR 41.37(a).

AMENDMENTS

3. ☑ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because
   a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   b) ☐ They raise the issue of new matter (see NOTE below);
   c) ☑ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____ (See 37CFR 1.116 and 41.33(a)).
4. ☐ The amendments are not in compliance with 37CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicants reply has overcome the following rejection(s): _____
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☑ For purposes of appeal, the proposed amendment(s):(a) ☑ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____
9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☑ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: The ids filed 12/2/20 requires further consideration.
13. ☑ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
14. ☑ Other: Please see attached form PTO 2323; PTO 413.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:
    Claim(s) allowed:_____.
    Claim(s) objected to:_____.
    Claim(s) rejected:1-3 and 5-24.
    Claim(s) withdrawn from consideration:_____.

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Examiner-Initiated Interview Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.		
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (First Inventor to File) Status** No	**Page** 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
PAUL C MCCORD	Primary Examiner	Telephonic
JEFFREY ARMSTRONG	Attorney of Record	

Date of Interview: 08 December 2020

Issues Discussed:

Other

Examiner reported that further consideration of the IDS beyond the time allotted to the pilot program was required.

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

AFCP 2.0 Decision	Application No.	Applicant(s)	
	16/670,109	Kallai et al.	
	Examiner	Art Unit	AIA (FITF) Status
	PAUL C MCCORD	2654	No

This is in response to the After Final Consideration Pilot request filed 04 December 2020.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

   ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.

   ☐ A non-broadening amendment to at least one independent claim was not submitted.

   ☐ The request is not the first proper AFCP 2.0 request submitted in response to the most recent final rejection.

   ☐ Other: _____

2. **Proper Request**

   A. After final amendment submitted with the request will not be treated under AFCP 2.0.
   The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

   ☐ The after final amendment will be treated under pre-pilot procedure.

   B. Updated search and/or completed additional consideration.
   The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

   ☐ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.

   ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action . See attached interview summary for further details.

   ☑ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.

   ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.

   ☐ 5. Other: _____

   Examiner Note: Please attach an interview summary when necessary as described above.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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	1	None						

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NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	Final Office Action mailed on 26 October 2020, issued in connection with U.S. Patent Application No. 16/297991, filed on 11 March 2019, 16 pages.	
	2	RF-RBWS02 Wireless Outdoor Speaker, Quick Setup Guide, RocketBoost Wireless, 2010, 4 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	3	Rocketfish - Rocket Boost Wireless, 13pages [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020] .	
	4	Rocketfish. Manuals & Support, RF-RBWS02, 10 October 2010, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	5	Rocketfish. Wireless Outdoor Speaker RF-RBWS02, Quick Setup Guide, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	6	Search Results for Rocketfish Outdoor Wireless Speaker pdf, Google.com, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	7	Sonos, Inc. v. Google LLC, Expert Report of Dr. Kevin Jeffay, PH.D., Regarding the Invalidity of U.S. Patent No. 9,219,959 [Redacted] dated 23 October 2020, 195 pages.	
	8	Sonos, Inc. v. Google LLC. Respondents' Final Invalidity Claims Charts for US Patent 9,219,959, Exhibits 1-9 and B, dated 4 September 2020, 525 pages.	
	9	Wireless Speakers. Best Buy, 4 March 2010, 4 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature	/PAUL C MCCORD/ 12/07/2020	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

EFS Web 2.1.18

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-12-02
Name/Print	Brandon J. Kennedy	Registration Number	67,894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

CLAIM AMENDMENTS

1. (Currently Amended) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers [[when]] after the playback device has determined it is not paired with the one or more other playback devices, and (iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers [[when]] after the playback device has determined it is paired with the one or more other playback devices.

2. (Previously Presented) The playback device of claim 1, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Canceled)

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the

playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on

audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

[[when]] after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

[[when]] after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers.

18. (Previously Presented) The method of claim 17, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies

based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

[[when]] after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

[[when]] after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers.

20. (Previously Presented) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

21. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

22. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

23. (Previously Presented). The tangible, non-transitory computer-readable media of claim 19, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least

one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

24. (Previously Presented) The tangible, non-transitory computer-readable media of claim 23, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"103313" and input same future	US-PGPUB; USPAT; DERWENT	OR	ON	2019/08/31 14:46
S2	1	"103313" and input same future and supplemen$9	US-PGPUB; USPAT; DERWENT	OR	ON	2019/08/31 14:47
S3	2	("20120130806" | "20130331147").PN.	US-PGPUB; USPAT	OR	ON	2019/09/03 07:19
S4	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:26
S5	3,450	S4 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S6	1,012	S5 and insert$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S7	59	S5 and insert$4 same (commercial$5 adverti$8 promotion$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S8	58	S5 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:28
S9	2	"20180054523"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:28
S10	4	"2006028213"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 08:29
S11	1	("20120130806" | "20130331147").PN. and future same3 respon$6	US-PGPUB; USPAT	OR	ON	2019/09/03 09:37
S12	0	("20120130806" | "20130331147").PN. and schedu$7	US-PGPUB; USPAT	OR	ON	2019/09/03 09:40
S13	1	("20120130806" | "20130331147").PN. and future same3 (plac$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 09:40
S14	1	("20120130806" | "20130331147").PN. and (time near2 period future) same3 (plac$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 09:42

S15	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S16	3,450	S15 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S17	19	S16 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S18	2	"754155".ap. and mesh$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:37
S19	1	"754155".ap. and mesh$4 same3 (group$6 ray)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:38
S20	5	"754155".ap. and group$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:39
S21	1	"754155".ap. and group$4 same ray	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:40
S22	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S23	3,450	S22 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S24	19	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S25	0	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S26	48,076	(natural near2 language nlu) same (dialog$6 learn$6 processing understand$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:56
S27	49,214	(natural near2 language nlu) same (dialog$6 learn$6 processing understand$6 convers$6 UI)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:56
S28	20	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S29	164	S26 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58

S30	817	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S31	168	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S32	9	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) same (succes$5 positiv$6 negat$6 accept$6 refus$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:00
S33	7	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) and ("704" "715").clas.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:01
S34	15	S32 S33	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:02
S35	142	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) and dialog$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:11
S36	1	("20120130806" | "20130331147").PN. and (voice dialog language)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:18
S37	1	("20120130806" | "20130331147").PN. and (voice dialog$4 language)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:19
S38	2	("20120130806" | "20130331147").PN. and (voice dialog$4 language vocal speech spok$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:19
S39	1	("20190066659").PN. and (voice dialog$4 language vocal speech spok$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:24
S40	11	sound near3 profile and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:34
S41	5	shih.in. and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S42	199	profile and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S43	0	profile and sonos.as. and shih	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S44	115	profile and sonos.as. and lan	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36
S45	4	profile and sonos.as. and lan same outside	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36
S46	50	profile and sonos.as. and wan	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36

S47	0	profile and sonos.as. and wan and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:37
S48	2	profile and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:37
S49	6	profile and sonos.as. and @pd<="20131124"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:38
S50	0	"676655".ap. and profl$4	US-PGPUB; USPAT	OR	ON	2019/09/03 15:39
S51	1	"676655".ap. and profil$4	US-PGPUB; USPAT	OR	ON	2019/09/03 15:39
S52	1	"676655".ap. and profil$4 same (visual$8 display$6 interfac$4 gui ui)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:40
S53	2	"272833".ap. and profil$4 same (visual$8 display$6 interfac$4 gui ui)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:40
S54	3	profil$4 same (visual$8 display$6 interfac$4 gui ui) and sonos.as. and @pd<="20131124"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:41
S55	1	profil$4 same (visual$8 display$6 interfac$4 gui ui) and "676655".ap.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:42
S56	133	korhonen.in. and (surround$4 "5.1")	US-PGPUB; USPAT	OR	ON	2019/09/03 15:42
S57	118	korhonen.in. and (surround$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:43
S58	18	korhonen.in. and (surround$4) and audio and channel$6	US-PGPUB; USPAT	OR	ON	2019/09/03 15:43
S59	63	("2008/0045140").URPN.	USPAT	OR	ON	2019/09/03 15:44
S60	0	equaliz$6 and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:45
S61	1	(equaliz$6 eq auto$8eq) and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:46
S62	41	id3$4 same (eq equali$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:46
S63	3	("20060087941" | "20060089736" | "7539551").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2019/09/03 15:48
S64	148	baudino.in.	US-PGPUB; USPAT	OR	ON	2019/09/03 16:52
S65	12	baudino.in. and surround	US-PGPUB; USPAT	OR	ON	2019/09/03 16:52
S66	1	"20080077261"	US-PGPUB; USPAT	OR	ON	2019/09/03 16:53
S67	86	("2008/0077261").URPN.	USPAT	OR	ON	2019/09/03 16:53

S68	0	"20070087686"	USPAT	OR	ON	2019/09/03 16:54
S69	2	"20070087686"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 16:54
S70	148	("2007/0087686").URPN.	USPAT	OR	ON	2019/09/03 16:55
S71	75	S70 and (id3$6 meta$6) and (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:55
S72	0	S70 and (id3$6 meta$6) same (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:55
S73	86	("2008/0077261").URPN.	USPAT	OR	ON	2019/09/03 16:57
S74	51	S73 and (id3$6 meta$6) and (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:57
S75	1	S70 and (id3$6 meta$6) same (frequency)	USPAT	OR	ON	2019/09/03 17:04
S76	130,802	(id3$6 meta$6) same (frequency)	USPAT	OR	ON	2019/09/03 17:04
S77	2,763	(id3$6 meta$6) same (frequency) near3 adjust$6	USPAT	OR	ON	2019/09/03 17:04
S78	27	(id3$6 meta$6) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	USPAT	OR	ON	2019/09/03 17:04
S79	62	(id3$6 meta$6) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:05
S80	25	(id3$6 meta$3data meta$6tag tag$4) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:06
S81	1,438	(id3$6 meta$3data meta$6tag tag$4) same (frequency) near3 adjust$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:06
S82	89	("2009/0047993").URPN.	USPAT	OR	ON	2019/09/03 17:08
S83	12	replaygain autoeq	USPAT	OR	ON	2019/09/03 17:10
S84	12	replay$4gain$4 autoeq$4	USPAT	OR	ON	2019/09/03 17:11
S85	79	replay$4gain$4 autoeq$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:11
S86	2	"20090047993"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13

S87	1	"20090047993" and (channel stereo surround)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13
S88	36	oh.in. and preset near4 metadata	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13
S89	5	(eq equali$8) same preset near3 metadata	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:07
S90	13	(eq equali$8) same preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:07
S91	116	(eq equali$8) and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:08
S92	0	oh.in. and (freqeuncy) and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S93	47	oh.in. and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S94	1	mpeg$6 and frequency same preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S95	1	("272833" "552049").pn. and available	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:35
S96	0	("272833" "552049").pn. and available and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:35
S97	0	("272833" "552049").pn. and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S98	0	("272833" "552049").pn. and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S99	3	("272833" "552049").ap. and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S100	3	("272833" "552049").ap. and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S101	3	("272833" "552049").ap. and avail$6 and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:37

S102	3	("272833" "552049").ap. and avail$6 and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S103	1	("272833" "552049").ap. and avail$6 same profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S104	1	"20120096125" and avail$6 same profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S105	2	"20120096125" and avail$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:39
S106	2	"20120096125" and avail$6 and (local near4 network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:30
S107	2	"20120096125" and avail$6 and (network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:31
S108	2	"20120096125" and avail$6 and profil$6 same (network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:32
S109	2	"20120096125" and avail$6 and profil$6 same (network sav$6 lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:32
S110	2	"20120096125" and avail$6 and profil$6 same (obtain$5 network sav$6 lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:33
S111	1,213	network$6 with $6speaker with (settings profile)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:40
S112	163	network$6 with $6speaker with (settings profile) same frequency	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:40
S113	9	network$6 with $6speaker with (settings profile) same frequency.ab.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:41
S114	100	network$6 with $6speaker with (settings profile).ab.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S115	11	network$6 with $6speaker with (settings profile).ab. and S112	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S116	344	network$6 with $6speaker with (settings profile) same (equaliz$6 frequency eq)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42

S117	11	S114 and S116	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S118	7	("20130173761" | "20140093085" | "20150094834" | "20150095774" | "20150200923" | "20160014514" | "20170094437").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2019/10/01 11:43
S119	104	thiele$8 with network	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S120	104	thiele$8 with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S121	0	(thiele$8small thiele adj small) with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S122	0	(theile$8small theile adj small) with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S123	11	(theile$8small theile adj small)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S124	142	(thiele$8small thiele adj small)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S125	153	S123 S124	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S126	1	S125 same network$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S127	4	S125 same (quer$6 network$6 server online)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S128	3	"20120096125" and profil$6 same (select$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:49
S129	41	id3$4 same (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:50
S130	7	"306313" and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53
S131	1	"306313".ap. and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53

S132	1	"306313".ap. and (eq equaliz$6) and database	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53
S133	60	("20070201717" | "20080181443" | "4742887" | "7194102" | "7489794" | "20050123162" | "20070223735" | "7634099" | "7864975" | "7317806" | "20070025559" | "6687379" | "20060104452" | "20060222185" | "7672469" | "20070135180" | "20090274309" | "20090041262" | "7194103" | "7869616" | "7263195" | "7876920" | "4284860" | "6687379" | "5784474" | "20060104453" | "20140112484" | "20070025559" | "20120106750" | "5784474" | "20120106750" | "7876921").PN.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:54
S134	47	"8131389" and (id3$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:57
S135	1	"8131389" and (id3$4 meta$6)and (id3$4 meta$6) same (eq equali$8)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:58
S136	0	korhonen.in. and id3$5	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:21
S137	142	("20010042107" | "20020022453" | "20020026442" | "20020072816" | "20020078161" | "20020124097" | "20030002689" | "20030157951" | "20030161479" | "20030210796" | "20040015252" | "20040024478" | "20040237750" | "20050147261" | "20060173972" | "20060205349" | "20060229752" | "20070003067" | "20070142944" | "20080002839" | "20080025535" | "20080045140" | "20080077261" | "20080092204" | "20080144864" | "20080152165" | "20080162668" | "20080175411" | "20090024662" | "20100052843" | "20100142735" | "20100284389" | "20100299639" | "20110044476" | "20110170710" | "20110299696" | "20120051558" | "20120096125" | "20120127831" | "20120263325" | "20130010970" | "20130028443" | "20130259254" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" |	US-PGPUB; USPAT	OR	ON	2019/10/01 13:22

		"20140233755" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "4995778" | "5218710" | "5440644" | "5553147" | "5668884" | "5673323" | "5761320" | "5910991" | "5923902" | "5946343" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6704421" | "6757517" | "6778869" | "6916980" | "6931134" | "7072477" | "7130608" | "7130616" | "7143939" | "7171010" | "7236773" | "7251533" | "7295548" | "7383036" | "7394480" | "7483538" | "7490044" | "7519188" | "7539551" | "7571014" | "7607091" | "7630500" | "7630501" | "7643894" | "7657910" | "7689305" | "7792311" | "7853341" | "7987294" | "8014423" | "8045952" | "8054987" | "8063698" | "8103009" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8234395" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8423893" | "8452020" | "8483853" | "8521316" | "8577045" | "8600075" | "8620006" | "8831761" | "8843224" | "8855319" | "8879761" | "8914559" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556").PN.				
S138	5	S137 and id3$5	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:22
S139	4	S137 and id3$5 and (eq equali$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:23
S140	2	S137 and id3$5 and (id3$5 meta$6) same (eq equali$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:24
S141	4	("20020072816" "20080045140").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:30
S142	2	("20020072816" "20080045140").pn. and select$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:30

S143	0	("20020072816" "20080045140").pn. and select$6 same profil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:33
S144	0	("20020072816" "20080045140").pn. and select$6 and profil$6 same (frequency eq equali$9 filter $5pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:33
S145	2	("20020072816" "20080045140").pn. and select$6 same (frequency parameter eq equali$9 filter $5pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:35
S146	262	"5594859" "20070297690"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 09:32
S147	2	"808676".ap. and peak	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 15:12
S148	2	"808676".ap. and peak and evolution	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 15:14
S149	9	"067747".ap. and switch$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S150	1	"067747".ap. and switch$4 near2 packet	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S151	7	mccord.xp. and swap$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S152	0	mccord.xp. and swap$6 same clock$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S153	7	mccord.xp. and clock.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S154	8	mccord.xp. and clock$4.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S155	3	"20080291863"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:23
S156	2	"20070087686"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:26
S157	4	"20070087686" "20040020193"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:26

S158	6	("20010020193" | "20040264717" | "20050195999" | "20080291863" | "7620468" | "9112622").PN.	US-PGPUB; USPAT	OR	ON	2020/03/02 11:27
S159	1	("20070087686" "20040020193") and (frequenc$6 equali$6 eq)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:29
S160	9	lenbrook	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:31
S161	785	((("SONOS") near3 ("INC"))).AS,AANM.	USPAT	OR	ON	2020/03/02 11:32
S162	47	((("SONOS"))).AS,AANM. and oleg.xp,xa.	USPAT	OR	ON	2020/03/02 11:32
S163	43	((("SONOS"))).AS,AANM. and mccord.xp,xa.	USPAT	OR	ON	2020/03/02 11:33
S164	1	"8942252".pn.	USPAT	OR	ON	2020/03/02 11:34
S165	3	"8942252".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:34
S166	2	"7391791".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:35
S167	14	("20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7975051" | "8270631" | "8601394" | "8688431").PN.	US-PGPUB; USPAT	OR	ON	2020/03/02 11:36
S168	20	S158 S167	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:36
S169	4	"20020072816" "20080077261"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:37
S170	14	"405931".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 16:45
S171	7	("186991" "619226" "248528" "363784").ap. and wollmershauser	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/04 09:24
S172	978	("7987294" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "7792311" "20090060219" "20090169030" "5774016" "8024055" "7308188"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12

		"6919771" "7630501" "20020150053" "987294" "7792311" "20120051567" "7263110" "7305694" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "6684060" "6571103" "6208846" "7710941" "7305694" "6684060" "6571103" "6208846" "7710941" "20020072816" "6469633" "20020124097" "7668964" "20020150053" "7630501" "20020072816") ("20010027498" | "20020124097" | "20020184310" | "20030055892" | "20030131226" | "20030204273" | "20030204509" | "20040133689" | "20040168081" | "20050170781" | "20050181348" | "20050216556" | "20050239445" | "20050262082" | "20060095516" | "20060142034" | "20060173976" | "20070022207" | "20070142944" | "20070192156" | "20080010652" | "20090138921" | "20090304205" | "20100036950" | "20130014232" | "5255326" | "5598278" | "5636345" | "5696896" | "5787249" | "5808662" | "5946343" | "6349352" | "6662231" | "6757517" | "6778869" | "6839752" | "6907458" | "6990211" | "7218708" | "7236739" | "7263070" | "7266840" | "7293060" | "7334043" | "7356011" | "7412499" | "7433324" | "7469139" | "7571014" | "7643894" | "7668990" | "7669219" | "7835689" | "8045952" | "8234395" | "8249071" | "8280076" | "8290603" | "8326951").PN. and social$5				
S173	971	("7987294" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "7792311" "20090060219" "20090169030" "5774016" "8024055" "7308188" "6919771" "7630501" "20020150053" "987294" "7792311" "20120051567" "7263110" "7305694" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "6684060" "6571103" "6208846" "7710941" "7305694" "6684060" "6571103" "6208846" "7710941" "20020072816" "6469633"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12

		"20020124097" "7668964" "20020150053" "7630501" "20020072816")				
S174	7	("20010027498" | "20020124097" | "20020184310" | "20030055892" | "20030131226" | "20030204273" | "20030204509" | "20040133689" | "20040168081" | "20050170781" | "20050181348" | "20050216556" | "20050239445" | "20050262082" | "20060095516" | "20060142034" | "20060173976" | "20070022207" | "20070142944" | "20070192156" | "20080010652" | "20090138921" | "20090304205" | "20100036950" | "20130014232" | "5255326" | "5598278" | "5636345" | "5696896" | "5787249" | "5808662" | "5946343" | "6349352" | "6662231" | "6757517" | "6778869" | "6839752" | "6907458" | "6990211" | "7218708" | "7236739" | "7263070" | "7266840" | "7293060" | "7334043" | "7356011" | "7412499" | "7433324" | "7469139" | "7571014" | "7643894" | "7668990" | "7669219" | "7835689" | "8045952" | "8234395" | "8249071" | "8280076" | "8290603" | "8326951").PN. and social$5	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12
S175	124	S173 and social$5	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:13
S176	7	("9665339" "9286384" "8234395").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:41
S177	6	("20130174204" "20090216855" "20100235520").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:44
S178	3	"20130073979"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:53
S179	3	"20130073979"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 20:04
S180	2	"20130073979" and authent$9 same (listen$4 song brows$4 music)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 09:22
S181	2	"20130073979" and authent$9 same (listen$4 song brows$4 music) same device	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 09:22

S182	2	"20130073979" and search$6 with user	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 10:52
S183	2	"20130073979" and (quer$6 search$6) with (graph user)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:09
S184	2	"20130073979" and (quer$6 search$6) with (graph user griend)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:10
S185	2	"20130073979" and (quer$6 search$6) with (graph user friend$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:10
S186	2	"20130073979" and (quer$6 search$6 distanc$4) with (graph user friend$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:16
S187	2	"20130073979" and (quer$6 search$6 distanc$4) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:17
S188	3	"20130073979" and (quer$6 search$6 distanc$4 connect$5) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:17
S189	2	"20130073979" and music with tracking	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:35
S190	15	"664634".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:41
S191	3	"20130073979" and (connect$5) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:43
S192	3	"20130073979" and (connect$5) with (graph user friend$5 social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S193	3	"20130073979" and (connect$5 friend$5) with (graph user social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S194	3	"20130073979" and (connect$5 friend$5 user) with (graph social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S195	4,042,155	"20130073979" and ceiling floor thresh$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:49
S196	2	"20130073979" and (ceiling floor thresh$8)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:49

S197	4	("20140122590" "20130073584").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 13:28
S198	2	"20130073979" and play$6 near4 device	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 13:53
S199	8	"9723038"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 14:11
S200	2	"9723038".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 14:11
S201	6	"20050195999" "20150092960"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:18
S202	0	"20050195999" and frequency	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:18
S203	80	yamaha and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:19
S204	80	yamaha and mccord.xp,xa.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:20
S206	25	yamaha.as. and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:20
S207	1	"727784".ap. and equil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:03
S208	4	b64c2220/00.cpc. and song	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:05
S209	7	b64c2220/00.cpc. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:05
S210	843	b64c.cpcl. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06
S211	33	b64c.cpcl. and (music song) and equil$9	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06
S212	47	b64c.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06

S213	35	g10k.cpcl. and motor with (equil$8 pwm)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:08
S214	79	S212 S213	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:08
S215	3	S212 and S213	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:09
S216	5	("20100134058" | "20110290573" | "20170130625" | "8212505" | "9271073").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 09:12
S217	1	"20130076286"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 09:32
S218	0	"20080326259"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 10:15
S219	5	"8212505"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 10:15
S220	0	("10193489").URPN.	USPAT	OR	ON	2020/03/09 10:17
S221	1	"20100134058"	USPAT	OR	ON	2020/03/09 10:21
S222	3	"20100134058"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:21
S223	178	"9202509" "8788080" "9219959" "10136218" "10555082"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:22
S224	15	("9202509" "8788080" "9219959" "10136218" "10555082").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:27
S225	4	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and frequen$6.ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:27
S226	6	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and (equal$7 frequen$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:28
S227	200	("10133536" | "10157033" | "10175930" | "20010001160" | "20010009604" | "20010020193" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

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		"7519188" | "7519667" | "7539551" | "7548744" | "7548851" | "7558224" | "7558635" | "7561932" | "7571014" | "7574274" | "7599685" | "7606174" | "7620468" | "7626952" | "7627825" | "7630500" | "7630501" | "7631119" | "7643894" | "7653344" | "7657224" | "7657644" | "7657910" | "7665115" | "7668990" | "7669113" | "7669219" | "7672470" | "7675943" | "7676044" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7975051" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8229125" | "8230099" | "8233029" | "8233632" | "8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8270631" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" |			

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S232	3	"20130163786"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 12:21
S233	25	yamaha.as. and mccord.xp,xa.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:46
S234	20	yamaha.as. and mccord.xp,xa. and (equali$8 eq frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:47
S235	8	"7933422" and (equali$8 eq frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:53
S236	198	yamaha.as. and (equali$8 eq frequency) and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:53
S237	51	yamaha.as. and (equali$8 eq frequency) same second and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:54
S238	3	"20040159218"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:15
S239	1	S238 and (equali$8 eq frequency) same second and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:17
S240	2	S238 and (equali$8 eq frequency) same second	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:17
S241	6	wireless$5 with (cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:15
S242	11	wireless$5 with (madi cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:16
S243	11	wireless$5 with (aes10 madi cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:20
S244	233	sonos.as. and (frequency equal$8).clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:59
S245	4	"318".clas. and (sound music) and (equil$9 with (amplitude volume))	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:26

S246	1	"727784".ap. and equil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S247	4	b64c2220/00.cpc. and song	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S248	7	b64c2220/00.cpc. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S249	845	b64c.cpcl. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S250	34	b64c.cpcl. and (music song) and equil$9	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S251	48	b64c.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S252	35	g10k.cpcl. and motor with (equil$8 pwm)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S253	80	S251 S252	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S254	3	S251 and S252	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S255	5	("20100134058" | "20110290573" | "20170130625" | "8212505" | "9271073").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
S256	1	"20130076286"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
S257	0	"20080326259"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
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S259	0	("10193489").URPN.	USPAT	OR	ON	2020/03/10 13:42
S260	1	"20100134058"	USPAT	OR	ON	2020/03/10 13:42
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S262	178	"9202509" "8788080" "9219959" "10136218" "10555082"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S263	15	("9202509" "8788080" "9219959" "10136218" "10555082").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S264	4	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and frequen$6.ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S265	1,064	S246 S247 S248 S249 S250 S251 S252 S253 S254 S255 S256 S257 S258 S259 S260 S261 S262 S263 S264 S264	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S266	49	"3736880"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:04
S267	99	g10k.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:05
S268	2	b64c2220/00.cpc. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S269	144	S267 S268 S251	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S270	1	"727784".ap. and S269	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S271	13	("2005/0195999").URPN.	USPAT	OR	ON	2020/03/18 11:49
S272	20	("20010020193" | "20020015003" | "20040264717" | "20050195999" | "20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7620468" | "7975051" | "8270631" | "8601394" | "8688431" | "9112622").PN.	US-PGPUB; USPAT	OR	ON	2020/04/03 09:21
S273	200	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" |	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22

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S278	4	("228812" "806070" "013740" "853790").ap. and sonos.as.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 11:09
S279	809	((("Sonos") near3 ("Inc"))).AS,AANM.	USPAT	OR	ON	2020/04/03 11:10
S280	6	("228812" "806070" "013740" "853790").ap. and sonos.as,aanm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 11:10

S281	2	"8422697"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 14:10
S282	11	"10228898"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/06 09:38
S283	3	"405931".ap. and driver	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:41
S284	5	("853790" "013740" "083499" "299847" "825961").ap. and speaker with driver	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:48
S285	7	("853790" "013740" "083499" "299847" "825961").ap. and (speaker driver) and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:48
S286	15	("8483853" "9202509" "8788080" "9219959" "9756424").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:50
S287	5	("8483853" "9202509" "8788080" "9219959" "9756424").pn. and determin$6 same pair$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:55
S288	4	("20020072816" "20080077261").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:18
S289	204	("20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7975051" | "8270631" | "8601394" | "8688431" | "20010020193" | "20040264717" | "20050195999" | "20080291863" | "7620468" | "9112622" | "20040114771" | "20060045281" | "20130236029" | "20150286360" | "20170188152" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

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		"7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8229125" | "8230099" | "8233029" | "8233632" | "8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" | "8886347" | "8904066" | "8914559").PN.				
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S294	1,055	S289 S290 S291 S292 S293	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:57
S295	195	S294 and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:58
S296	55	S294 and (eq equaliz$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:58
S297	0	"001502".ap. and teim with change same first	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:08

S298	1	"001502".ap. and time with change same first	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:08
S299	1	"001502".ap. and time with change same signal	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:09
S300	3	"001502".ap. and time with change	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:09
S301	15	"486646".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:31
S302	15	tunersphere	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S303	14	tunersphere and point$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S304	14	tunersphere and point$4 with user	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S305	272	user near3 point$4 same arm near9 angle	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:33
S306	26	user near3 point$4 same arm near9 angle and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:34
S307	27	user near3 (indicat$6 point$4) same arm near9 angle and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:34
S308	13	"275889".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:35
S309	25	user near3 (indicat$6 point$4) same arm near9 angle same3 distanc$4 and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:59
S310	13	("20020129128" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/04/16 14:37
S311	62	sonos.as. and lambourne.in. and scene	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:12

S312	1	"613471".ap. and triplett	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:12
S313	2	"20170269900"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:13
S314	4	sonos.as. and lambourne.in. and scene and @pd<="20130723"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:13
S315	4	("7571014" "20130014015").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:18
S316	45	("2013/0014015").URPN.	USPAT	OR	ON	2020/05/13 10:40
S317	0	"20130014015".pn.	USPAT	OR	ON	2020/05/13 10:41
S318	2	"20130014015".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:41
S319	2	"619237".ap. and lambourne	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:41
S320	0	"338710".ap. and soos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:20
S321	2	"338710".ap. and sonos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:20
S322	1	"8989882".pn. and (video type).clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:31
S323	1,740	auxil$7 near2 channel and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S324	35,142	(mp4 mpeg4 mpeg adj "4" mpeg$3"4") and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S325	168	(mp4 mpeg4 mpeg adj "4" mpeg$3"4") and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and S323	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S326	20,405	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") S323)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:00

S327	19,433	((mp4 mpeg4 mpeg adj "4" mpeg$3"4"))and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:01
S328	10	"676655".ap. and (eq equal$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:43
S329	1,740	auxil$7 near2 channel and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:56
S330	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") S329)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:56
S331	22,581	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:59
S332	8,929	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 adj data)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:59
S333	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:00
S334	22,581	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S335	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S336	1,027	S334 and S335	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S337	156	sonos.as. and @ad<="20080101"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:51

S338	185	sonos.as. and @ad<="20101013"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:51
S339	46	sonos.as. and @ad<="20101013" and (frequency eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:52
S340	33	sonos.as. and @ad<="20101013" and (frequency eq equaliz$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:55
S341	4	"20090047993" "20080098027"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:57
S342	109	("2009/0047993").URPN.	USPAT	OR	ON	2020/07/02 15:58
S343	16	("2009/0047993").URPN. not sonos.as.	USPAT	OR	ON	2020/07/02 15:59
S344	16	("2009/0047993").URPN. not sonos.as,aanm.	USPAT	OR	ON	2020/07/02 15:59
S345	1	("20020072816" "20080045140" "8131389").pn.	USPAT	OR	ON	2020/07/02 16:07
S346	6	("20020072816" "20080045140" "8131389").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:08
S347	1	S346 and (cluster$4 source) with (network server)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:20
S348	34	"5646602"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:23
S349	3	"5646602".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:24
S350	12	("5287547" "5182552" "5818948" "5646602").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:56
S351	3	("5287547" "5182552" "5818948" "5646602").pn. and (internet wan wide)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:58
S352	2	profile$4 same network and wan and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:29
S353	11	(wide wan) and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:30

S354	6	(wide wan) and "272833".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:31
S355	2	profile$4 same lan and wan and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:33
S356	22,592	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S357	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S358	1,027	S356 and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S359	209	(acoustic$6 eq equaliz$6 frequency) near2 (profile pref preferenc$4) near4 (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:43
S360	0	S357 and S359	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S361	784	(acoustic$6 eq equaliz$6 frequency) near2 (profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S362	4,404	(acoustic$6 eq equaliz$6 frequency) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S363	6,510	(acoustic$6 eq equaliz$6 frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S364	53	S357 and S363	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:45
S365	29,797	S356 S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S366	252	S365 and S363	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S367	199	S365 and S363 not S364	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46

S368	59	S365 and S363 not S364 and (700/94.ccls. "381".clas. "704".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S369	26	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library) and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:06
S370	90	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:07
S371	64	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and S357 not S369	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:08
S372	5	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:13
S373	269	chung and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:13
S374	32	chung.in. and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:15
S375	1	chung.in. and mccord.xa,xp.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:15
S376	49	preset and mccord.xa,xp.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:16
S377	1	"8880205" and supplemental	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:18
S378	2	"20060149402" and supplemental	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:19
S379	2	"20060149402" and supplemental same network	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:21
S380	5	("20030100335" | "20060281409" | "20160234615" | "7215649" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/07/04 13:39
S381	17	"10448159" "10642570"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40

S382	64	"2012137190"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S383	4	("10448159" "10642570").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S384	4	"2012137190".did.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S385	7	S383 S384	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:41
S386	114	"9195258" "10209953"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:44
S387	11	("9195258" "10209953" "8588949" "9219959" "10439896").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:45
S388	2	"20030220705"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:48
S389	5	("8588949" "9219959").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:49
S390	203	("20030100335" | "20060281409" | "20160234615" | "7215649" | "9344206" | "20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20040203936" | "5313524" | "6085236" | "6741708" | "7274761" | "7690017" | "8134650" | "10133536" | "10157033" | "10175930" | "20010001160" | "20010009604" | "20010020193" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" | "20030020763" | "20030023741" | "20030031333" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030055892" | "20030061428" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030091322" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030110329" | "20030126211" | "20030135822" | "20030157951" | "20030161479" | "20030167335" | "20030172123" | "20030177889" | "20030179780" | "20030185400" | "20030195964" | "20030198254" | "20030198255" | "20030198257" | "20030200001" | "20030204273" | "20030204509" | "20030210796" | "20030212802" | "20030219007" | "20030227478" | "20030229900" | "20030231208" | "20030231871" | "20030235304" | "20040001106" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040012620" | "20040014426" | "20040015252" | "20040019497" | "20040019807" | "20040019911" | "20040023697" | "20040024478" | "20040024925" | "20040027166" | "20040032348" | "20040032421" | "20040037433" | "20040041836" | "20040042629" | "20040044742" | "20040048569" | "20040059842" | "20040059965" | "20040066736" | "20040071299" |			

		"20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "20040114771" | "20040117044" | "20040117462" | "20040128701" | "20040131192" | "20040133689" | "20040143368" | "20040143852" | "20040147224" | "20040148237" | "20040168081" | "20040170383" | "20040171346" | "20040177167" | "20040179554" | "20040183827" | "20040185773" | "20040203354" | "20040203378" | "20040203590" | "20040208158" | "20040213230" | "20040220687" | "20040223622" | "20040224638" | "20040225389" | "20040228367" | "20040248601" | "20040249490" | "20040249965" | "20040249982" | "20040252400" | "20040253969" | "20040264717" | "20050002535" | "20050010691" | "20050011388" | "20050013394" | "20050015551").PN.				
S391	200	("20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050144284" | "20050147261" | "20050154766" | "20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050195999" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060045281" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" | "20060193454" | "20060193482" | "20060199538" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

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		"6349339"	"6351821"	"6353172"				
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		"8144883" | "8148622" | "8150079" |				
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		"8170260" | "8175292" | "8175297" |				
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		"8229125" | "8230099" | "8233029" |				
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S400	0	S388 and (S391 S392 S393 S394 S395 S396 S397 S398 S399 S390)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:51
S401	2	"8788080".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 15:51
S402	4	"8509463".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:24
S403	2	"7571014".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:27
S404	3	"921959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:29
S405	3	"9219959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:30
S406	2	"8483853".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S407	0	"013740".pn. and sonos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S408	0	"013740".pn. and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S409	2	"013740".ap. and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S410	2	"7987294".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:36
S411	0	"8423893".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:37

S412	3	"8423893".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:37
S413	96	"9219959"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:43
S414	3	"9219959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:43
S415	2	"7792311".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:45
S416	3	"20090087000"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:47
S417	743	"7483538"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:48
S418	2	"7483538".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:48
S419	2	"20040014426".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:50
S420	2	"7561697".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:52
S421	2	"7123731".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:55
S422	2	"20050100174".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:57
S423	3	"5910990".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:59
S424	2	"7634093".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 14:00
S425	2	"7899656".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 14:00
S426	6	"7907736".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 14:02

S427	2	"7483538".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 09:58
S428	2	"9219959".pn. and network with interface	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 10:06
S429	1	"7483538".pn. and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:40
S430	0	"7561697 ".pn. and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:47
S431	0	"7561697".pn. and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:47
S432	2	"7561697".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:47
S433	2	"7123731 ".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:48
S434	2	"7123731".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:48
S435	2	"7123731".pn. and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:49
S436	2	"20050100174 ".pn. and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:51
S437	2	"20050100174".pn. and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:51
S438	3	("20050100174".pn. "7899656".pn.) and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:52
S439	3	("20050100174".pn. "7096169".pn.) and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:53
S440	1	("20050100174".pn. "7096169".pn.) and (eq equali$9 frequency) and (sav$5 stor$5 recall$6) with environ$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:54
S441	0	("20050100174".pn. "7096169".pn.) and (eq equali$9 frequency) same3 (sav$5 stor$5 recall$6) with environ$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:54

S442	1	("20030215097".pn.) and (eq equali$9 frequency) and (sav$5 stor$5 recall$6) with environ$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 12:07
S443	1	("20030215097".pn.) and (eq equali$9 frequency filter$4) and (sav$5 stor$5 recall$6) with environ$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 12:08
S444	1	("20050100174".pn. "7899656".pn.) and ($4pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 13:20
S445	1	("20050100174".pn. "7899656".pn.) and ($4pass pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 13:20
S446	4	"20050008145" "20030072362"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 10:31
S447	4	("20050008145" "20030072362")	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 10:37
S448	0	("20050008145" "20030072362") and markov$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 10:39
S449	5	("20020083172" | "20020083342" | "20020112084" | "20030023411" | "20030046703").PN.	US-PGPUB; USPAT	OR	ON	2020/07/07 11:44
S450	17	("20050235334" | "20060083388" | "20070053514" | "20070220150" | "20080109852" | "20090006968" | "20100332565" | "20110301728" | "20120304233" | "5642171" | "6119239" | "6122749" | "6703940" | "7269338" | "7313384" | "8601394" | "8688431").PN.	US-PGPUB; USPAT	OR	ON	2020/07/07 11:47
S451	51	(tak$4over tak$3 near2 over) same (signal) near3 present$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:53
S452	10	("20020083172" | "20020083342" | "20020112084" | "20030023411" | "20030046703" | "000None").PN.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:55
S453	48	("20050235334" | "20060083388" | "20070053514" | "20070220150" | "20080109852" | "20090006968" | "20100332565" | "20110301728" | "20120304233" | "5642171" | "6119239" | "6122749" | "6703940" | "7269338" | "7313384" | "8601394" | "8688431").PN.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:55

S454	6	("20040239816" | "20060029005" | "7571014").PN.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:55
S455	64	S452 S453 S454	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:55
S456	3	"20110301728"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S457	2	"20070220150"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S458	4	(S456 S457) and S455	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S459	2	"20110301728".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S460	2	"20070220150".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S461	4	S459 S460	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:56
S462	4	S455 and S461	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 12:57
S463	57	(line adj in line$in) and (signal) near3 priorit$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 13:04
S464	24	("2011/0301728").URPN.	USPAT	OR	ON	2020/07/07 13:05
S465	53	("2007/0220150").URPN.	USPAT	OR	ON	2020/07/07 13:05
S466	372	(audio av media $6media) near2 input with priori$8	USPAT	OR	ON	2020/07/07 14:15
S467	454	(audio av media $6media music sound) near2 input$4 with priori$8	USPAT	OR	ON	2020/07/07 14:16
S468	1,017	(audio av media $6media music sound) near2 input$4 with priori$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:17
S469	57	(line adj in line$in) and (signal) near3 priorit$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:18

S470	0	(audio av media $6media music sound) near2 input$4 with priori$8 and S469	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:18
S471	6	(line adj in line$in) and S468	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:18
S472	3	"20110185048" and trigger$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:22
S473	330	(audio av media $6media music sound) near2 input$4 with priori$8 and (cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:24
S474	367	(audio av media $6media music sound) near2 input$4 with priori$8 and (cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/07 14:24
S531	2	"166518".ap. and media with type	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/08 16:30
S532	6	("20080077261" "20150215715" "20160192098").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 15:32
S533	3	("20080077261" "20150215715" "20160192098").pn. and (enter enter$4 leave leav$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 15:35
S534	3	("20080077261" "20150215715" "20160192098").pn. and (position$4 enter enter$4 leave leav$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 15:35
S535	2	("20080077261" "20150215715" "20160192098").pn. and deliver$5	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 16:01
S536	0	("20100272270" "5872743" "20080144876" "8880205" "8285405").ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 16:26
S537	11	("20100272270" "5872743" "20080144876" "8880205" "8285405").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/16 16:26
S538	9,120	program adj map with (database table field matrix)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:42
S539	19,813	program adj map with (database table field matrix) and mpeg$5ts mpeg$6 near2 ts	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:43
S540	3,163	program adj map with (database table field matrix) and (mpeg$5ts mpeg$6 near2 ts)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:44

S541	262	program adj map with (database table field matrix) and (mpeg$5ts mpeg$6 near2 ts).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:52
S542	2,364	program adj map with (database table field matrix) and (mpeg$5ts mpeg$6 near2 ts) and stream$5 near3 (identifi$6 id)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:53
S543	686	program adj map with (database table field matrix) and (mpeg$5ts mpeg$6 near2 ts) and stream$5 near3 (identifi$6 id) and channel same object	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 10:53
S545	5	("20020083172" | "20020083342" | "20020112084" | "20030023411" | "20030046703").PN.	US-PGPUB; USPAT	OR	ON	2020/07/17 11:38
S546	5	("20020083172" | "20020083342" | "20020112084" | "20030023411" | "20030046703").PN.	US-PGPUB; USPAT	OR	ON	2020/07/17 11:45
S547	17	("20050235334" | "20060083388" | "20070053514" | "20070220150" | "20080109852" | "20090006968" | "20100332565" | "20110301728" | "20120304233" | "5642171" | "6119239" | "6122749" | "6703940" | "7269338" | "7313384" | "8601394" | "8688431").PN.	US-PGPUB; USPAT	OR	ON	2020/07/17 11:48
S548	1,836	microphone near2 line near3 input	US-PGPUB; USPAT	OR	ON	2020/07/17 11:49
S549	25	microphone near2 line near3 input and apple.as.	US-PGPUB; USPAT	OR	ON	2020/07/17 11:50
S550	0	microphone near2 line near3 input and apple.as. and vad	US-PGPUB; USPAT	OR	ON	2020/07/17 11:51
S551	13	microphone near2 line near3 input and vad	US-PGPUB; USPAT	OR	ON	2020/07/17 11:51
S552	45	microphone near2 input and vad.ab. and $6phone	US-PGPUB; USPAT	OR	ON	2020/07/17 11:56
S553	2,308,997	microphone near2 input and vad.ab. and cellular $6phone	US-PGPUB; USPAT	OR	ON	2020/07/17 11:56
S554	14	microphone near2 input and vad.ab. and cellular adj $6phone	US-PGPUB; USPAT	OR	ON	2020/07/17 11:56
S555	10	"166518".ap. and line	US-PGPUB; USPAT	OR	ON	2020/07/17 12:52
S556	1	"20190121604"	US-PGPUB; USPAT	OR	ON	2020/07/17 12:52
S557	22	program adj map with (database table field matrix) and (mpeg$5ts mpeg$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/17 12:55

		near2 ts).ab,clm. and stream$5 near3 (identifi$6 id) and channel same object				
S590	375	song with message and greeting near2 card	US-PGPUB; USPAT; DERWENT	OR	ON	2020/11/19 10:29
S591	63	play$5 near3 song same3 (recording records)near3 message and greeting near2 card	US-PGPUB; USPAT; DERWENT	OR	ON	2020/11/19 10:29
S592	63	play$5 near3 song same3 (recording records)near3 message and (holiday birthday greeting) near2 card	US-PGPUB; USPAT; DERWENT	OR	ON	2020/11/19 11:32
S593	2	"20120148075"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/07 16:20
S594	253	("2012/0148075").URPN.	USPAT	OR	ON	2020/12/07 16:21
S595	0	("2012/0148075").URPN. and goh.in.	USPAT	OR	ON	2020/12/07 16:22
S596	17	("2012/0148075").URPN. and mccord	USPAT	OR	ON	2020/12/07 16:29
S597	6	("7987294" "8509463" "20120148075" "7792311" "20050100174" "20020124097" "5910990" "8423893" "7907736").pn.	USPAT	OR	ON	2020/12/07 16:35
S598	26	("7987294" "8509463" "20120148075" "7792311" "20050100174" "20020124097" "5910990" "8423893" "7907736").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/07 16:35
S599	18	("8509463").URPN.	USPAT	OR	ON	2020/12/07 16:45
S600	126	("7792311").URPN.	USPAT	OR	ON	2020/12/07 17:30
S601	1	"20150092960"	USPAT	OR	ON	2020/12/08 10:40
S602	3	"20150092960"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:41
S603	1	"351170".ap. and group$5.ti.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:52
S604	2	"20190243603"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:53
S605	790	(cloud$6 network$4 internet) same server and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:55

S606	1,213	(cloud$6 network$4 internet) same (stor$4 server) and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:55
S607	1,215	(cloud$6 network$4 internet wan) same (stor$4 server) and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:55
S608	0	(go6F/16 g06F/162 g06F/165 g06F/167).cpc.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:56
S609	136,618	h04r.cpcl.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:56
S610	28,556	((G05B15/02).CPC.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S611	0	(g06F/16 g06F/162 g06F/165 g06F/167).cpc.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S612	0	(G06F/16 G06F/162 G06F/165 G06F/167).cpc.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S613	37,357	(G06F3/16 G06F3/162 G06F3/165 G06F3/167).cpc.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S614	7,170	S609 and S613	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S615	485	S609 and S610	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:57
S616	1,119	S610 and S613	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:58
S617	107	S607 and (S609 S610 S613)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 10:58
S618	1,558,679	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:02
S619	1,215	(cloud$6 network$4 internet wan) same (stor$4 server) and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:04

S620	136,618	h04r.cpcl.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:04
S621	28,556	((G05B15/02).CPC.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:04
S622	37,357	(G06F3/16 G06F3/162 G06F3/165 G06F3/167).cpc.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:04
S623	107	S619 and (S620 S621 S622)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:04
S624	708	S618 and S619	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:05
S625	515	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation) same (stor$4 server back$6 memory) and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:06
S626	59	S625 and (S620 S621 S622)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:09
S627	150	(cobra$3net$4 ether$3sound$4 dante$4) and (S620 S621 S622)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:09
S628	606	S625 S627	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:09
S629	67,731	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation) same (stor$4 server back$6 memory) and S620 S621 S622	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:12
S630	14,206	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation) same (stor$4 server back$6 memory) and (S620 S621 S622)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:12
S631	6,388	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation) same (stor$4 server back$6 memory) and (S620 S621 S622) and (sync synchron$7)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:15

S632	2,190	(cloud$6 network$4 internet wan) same (zone scene config configurat$3 snap$3shot cad group$4 sub$3set constellation) same (stor$4 server back$6 memory) and (S620 S621 S622) and (sync synchron$7) near5 (output$4 play$5 deliv$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:17
S633	54,136	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:20
S634	1,966	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5) and S632	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:20
S635	2	"20190243603"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:21
S636	2,017	(S621 S622) AND ((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/007).CPC.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:23
S637	69,856	(S621 S622) ((H04R2227/003 OR H04R2227/005 OR H04R27/00 OR H04R29/007).CPC.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:23
S638	2,908	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5) and S637	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:23
S639	13	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5) and S637 and S625	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 11:39
S640	466	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5) and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 12:11
S641	8	(cloud$6 network$4 internet wan) same5 (sync synchron$7) near5 (output$4 play$5 deliv$5) and 700/94.ccls. and (cobra$3net$4 ether$3sound$4 dante$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/12/08 12:19

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S475	631	(audio av media $6media music sound stream$4) near2 input$4 with priori$8 and (cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8)	US-PGPUB; USPAT	OR	ON	2020/07/07 14:25

S476	15,821	(line adj in line$in)	US-PGPUB; USPAT	OR	ON	2020/07/07 14:25
S477	4,466	(audio av media $6media music sound stream$4) near2 input$4 same priori$8	US-PGPUB; USPAT	OR	ON	2020/07/07 14:26
S478	10,382	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8)	US-PGPUB; USPAT	OR	ON	2020/07/07 14:26
S479	2,582,577	(line adj in line$in analog audio $6media media) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/07 14:26
S480	203,425	(activ$6 present$6 exist$6) near9 (line adj in line$in analog audio $6media media) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/07 14:27
S481	15,821	(line adj in line$in)	US-PGPUB; USPAT	OR	ON	2020/07/07 15:06
S482	10,382	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8)	US-PGPUB; USPAT	OR	ON	2020/07/07 15:06
S483	109	S481 and S482	US-PGPUB; USPAT	OR	ON	2020/07/07 15:06
S484	1	"Term Removed" and ceas$4	US-PGPUB; USPAT	OR	ON	2020/07/07 15:08
S485	1,243	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/07 15:17
S486	727	(line adj in line$in).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/07 15:18
S487	1	S485 and S486	US-PGPUB; USPAT	OR	ON	2020/07/07 15:18
S488	203,425	(activ$6 present$6 exist$6) near9 (line adj in line$in analog audio $6media media) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 11:04

S489	1,243	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/08 11:04
S490	412	S489 and S488	US-PGPUB; USPAT	OR	ON	2020/07/08 11:04
S491	203,425	(activ$6 present$6 exist$6) near9 (line adj in line$in analog audio $6media media) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 11:38
S492	1,243	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8).ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/08 11:38
S493	412	S492 and S491	US-PGPUB; USPAT	OR	ON	2020/07/08 11:38
S494	93,277	(activ$6 present$6 exist$6) near9 (line adj in line$in analog physical) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 11:46
S495	39	S494 and S492	US-PGPUB; USPAT	OR	ON	2020/07/08 11:50
S496	2,855	signal$6 near3 ($5take$over take$over priori$8) same3 (line adj in line$in analog physical) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 11:51
S497	103,832	(activ$6 present$6 exist$6) near9 (line adj in line$in analog physical line near2 input$4) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 12:00
S498	7,932	(activ$6 present$6 exist$6) near9 (line adj in line$in analog physical line near2 input$4) same3 input$4.clm,ab.	US-PGPUB; USPAT	OR	ON	2020/07/08 12:29
S499	45	S492 and S497	US-PGPUB; USPAT	OR	ON	2020/07/08 12:29
S500	5	S492 and S498	US-PGPUB; USPAT	OR	ON	2020/07/08 12:38
S502	8,579	((G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:50
S503	4,955	((G11B27/10).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:51

S504	377	((H02B1/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:53
S505	586	((H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:53
S506	11,329	((H04R2227/005 OR H04R27/00 OR H04R3/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:53
S507	67	S498 and (S502 S503 S504 S505 S506)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:54
S508	1,813	S502 and S506	US-PGPUB; USPAT	OR	ON	2020/07/08 12:54
S509	20	(activ$6 present$6 exist$6) near9 (line adj in line$in analog physical line near2 input$4) same3 input$4 and S508	US-PGPUB; USPAT	OR	ON	2020/07/08 12:55
S510	985	S494 and (S502 S503 S504 S505 S506)	US-PGPUB; USPAT	OR	ON	2020/07/08 12:55
S511	18,095	S502 S506	US-PGPUB; USPAT	OR	ON	2020/07/08 12:57
S512	37	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8) and S510	US-PGPUB; USPAT	OR	ON	2020/07/08 12:57
S513	187	S511 and S503	US-PGPUB; USPAT	OR	ON	2020/07/08 12:58
S514	9	S511 and S504	US-PGPUB; USPAT	OR	ON	2020/07/08 12:58
S515	101	S511 and S505	US-PGPUB; USPAT	OR	ON	2020/07/08 12:58
S516	93,277	(activ$6 present$6 exist$6) near9 (line adj in line$in analog physical) same3 input$4	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S517	8,579	((G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S518	4,955	((G11B27/10).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20

S519	377	((H02B1/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S520	586	((H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S521	11,329	((H04R2227/005 OR H04R27/00 OR H04R3/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S522	985	S516 and (S517 S518 S519 S520 S521)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S523	37	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8) and S522	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S524	37	S523	US-PGPUB; USPAT	OR	ON	2020/07/08 14:20
S525	18,095	S517 S521	US-PGPUB; USPAT	OR	ON	2020/07/08 14:30
S526	573	(audio av media $6media music sound stream$4) near2 input$4 same(cross$3fad$4 segu$4 interr$9 preempt$6 pre$empt$6 de$activ$8 priori$8) and S525	US-PGPUB; USPAT	OR	ON	2020/07/08 14:30
S527	279	S525 and (S518 S519 S520)	US-PGPUB; USPAT	OR	ON	2020/07/08 14:31
S528	7	S516 and S527	US-PGPUB; USPAT	OR	ON	2020/07/08 14:31
S529	36	S516 aND S526	US-PGPUB; USPAT	OR	ON	2020/07/08 14:31
S530	43	S528 S529	US-PGPUB; USPAT	OR	ON	2020/07/08 14:32
S558	21,210	((G06F3/16 g06f3/167 G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 12:57
S559	0	g11b3.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 12:57

S560	0	G11B3.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 12:58
S561	0	G11B27.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 12:58
S562	227,963	G11B.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 13:00
S563	1,574	S558 and S562	US-PGPUB; USPAT	OR	ON	2020/07/17 13:00
S564	8,993	((G06F3/162 OR G06F3/165 OR H02B1/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 13:01
S565	377	((H02B1/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 13:01
S566	24,122	H03G.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 13:30
S567	20,593	((H04R2227/005 OR H04R27/00 H04R2227/003 H04R2227/007 H04R2227/009 H04R2227/001 H04R2227/00 OR H04R3/005 H04R3/02 H04R3/04 H04R3/12 H04R3/06 H04R3/08 H04R3/14 H04R3/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 13:33
S568	2,690	S558 and S567	US-PGPUB; USPAT	OR	ON	2020/07/17 13:33
S569	783	S568 and (S562 S565 S566)	US-PGPUB; USPAT	OR	ON	2020/07/17 13:33
S570	286,810	S558 S567 (S562 S565 S566)	US-PGPUB; USPAT	OR	ON	2020/07/17 13:34
S571	197,141	(line adj in line$in analog physical line near2 input$4) same3 input$4.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/17 13:34
S572	9,234	S570 and S571	US-PGPUB; USPAT	OR	ON	2020/07/17 13:49
S573	3,661	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and S572	US-PGPUB; USPAT	OR	ON	2020/07/17 13:50

S574	259	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and S569	US-PGPUB; USPAT	OR	ON	2020/07/17 14:07
S575	18,815	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and (S562 S565 S566)	US-PGPUB; USPAT	OR	ON	2020/07/17 14:08
S576	8,524	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and (S558 S567)	US-PGPUB; USPAT	OR	ON	2020/07/17 14:08
S577	22,970	"s71" and ("s75" "s76")	US-PGPUB; USPAT	OR	ON	2020/07/17 17:14
S578	21,210	((G06F3/16 g06f3/167 G06F3/162 OR G06F3/165).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S579	227,963	G11B.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S580	377	((H02B1/00).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S581	24,122	H03G.cpcl.	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S582	20,593	((H04R2227/005 OR H04R27/00 H04R2227/003 H04R2227/007 H04R2227/009 H04R2227/001 H04R2227/00 OR H04R3/005 H04R3/02 H04R3/04 H04R3/12 H04R3/06 H04R3/08 H04R3/14 H04R3/00 OR H04R3/12).CPC.)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S583	197,141	(line adj in line$in analog physical line near2 input$4) same3 input$4.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S584	18,815	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and (S579 S580 S581)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S585	8,524	(activ$6 present$6 exist$6 sens$6 determin$6 discov$6 poll$4) near9 (line adj in line$in analog physical line near2 input$4) and (S578 S582)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15

S586	3,661	S583 and (S584 S585)	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15
S587	749	"7483538" "20030215097"	US-PGPUB; USPAT	OR	ON	2020/07/17 17:32
S588	2	("7483538" "20030215097").pn.	US-PGPUB; USPAT	OR	ON	2020/07/17 17:32
S589	1	"20190121604"	US-PGPUB; USPAT	OR	ON	2020/07/18 07:34

12/8/2020 4:58:08 PM
C:\Users\pmccord\Documents\EAST\Workspaces\kallai_new_9_19.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)
(MBHB 15-1432-US-CON5)

In the Application of:	)	
	)	
Christopher Kallai, et al.	)	Examiner: MCCORD, PAUL
	)	
Application No.: 16/670,109	)	Group Art Unit: 2654
	)	
Filed: October 31, 2019	)	Confirmation No. 7387
	)	
Title: Playback Device Pairing	)	
	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO FINAL MAILED OCTOBER 26, 2020
SUBMITTED WITH A REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM

Please consider the following Amendments and Remarks submitted with a Certification and Request for Consideration under the After Final Consideration Pilot Program 2.0 in response to the Final Office Action mailed on October 26, 2020 in the above-captioned application.

AMENDMENTS TO THE CLAIMS begin on page 2.

REMARKS begin on page 10.

Please charge any underpayment of fees or credit any overpayment of fees in connection with the prosecution of the above-captioned application to Deposit Account 13-2490.

Doc Code: A.NE.AFCP
Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0

Practitioner Docket No.:	Application No.:	Filing Date:
11-0401-CON1019A	16/670,109	October 31, 2019
First Named Inventor:	**Title:**	
Kallai, Christopher	Playback Device Pairing	

APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116.

1. The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (*e.g.*, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c).
2. The above-identified application contains an outstanding final rejection.
3. Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect.
4. This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection.
5. Applicant is willing and available to participate in any interview requested by the examiner concerning the present response.
6. This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web).
7. Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.]
8. By filing this certification and request, applicant acknowledges the following:
   - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0.
   - The examiner will verify that the AFCP 2.0 submission is compliant, *i.e.*, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions:
     - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, *e.g.*, by mailing an advisory action.
     - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview.
       - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate.
       - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.

Signature	Date
/Jeffrey P. Armstrong/	December 4, 2020
Name (Print/Typed) Jeffrey P. Armstrong	**Practitioner Registration No.** 54,967

***Note**: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.*

☑ * Total of 1 forms are submitted.

Electronic Acknowledgement Receipt	
EFS ID:	41303467
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	04-DEC-2020
Filing Date:	31-OCT-2019
Time Stamp:	18:34:57
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11-0401-CON1019A_Response.pdf	105475 30bbdf40b6dc8a8a6b12012035da82ea43c76fdf	yes	15

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	10	15
	Claims	2	9
	Response After Final Action	1	1

Warnings:					
Information:					
2	After Final Consideration Program Request	11-0401-CON1019A_AFCP.pdf	133746 f9d778af22d004945727ec02a60d3e16839f100d	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	239221		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

REMARKS

I. Summary of the Claims

Claims 1-3 and 5-25 are pending; claims 1, 17, and 19 are independent. Without conceding the merits of the rejection, and solely to advance prosecution, Applicant has amended claims 1, 17, and 19 to further clarify the claim language.

II. Summary of the Final Office Action

In the Final Office Action mailed October 26, 2020, the Examiner: (i) confirmed that the claims are entitled to the April 8, 2011 priority date of U.S. App. 13/083,499; and (ii) rejected claims 1-3 and 5-24 under 35 U.S.C. § 103 based on U.S. Pat. 7,483,538 (McCarty) and Yamaha DME Designer (DME).

III. Summary of the Examiner Interview on November 20, 2020

A telephonic examiner interview took place on November 20, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the call, the participants discussed the Final Office Action mailed on October 26, 2020, the McCarty and DME references, and proposed amendments to claim 1. No exhibits were shown and no demonstrations were conducted. The participants agreed that claims are patentable over the prior art of record.

IV. Response to the § 103 Rejections based on McCarty and DME

McCarty and DME, individually or in combination, fail to teach or suggest all the elements recited in the claims. For example, with reference to independent claim 1, the combination of McCarty and DME fail to teach or suggest at least "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other

playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is paired with the one or more other playback devices," in combination with the other recited claim elements.

A. McCarty fails to teach or suggest the determining, configuring, and changing elements recited in the claims

McCarty discloses a surround sound system with a center channel speaker that distributes audio content to other speakers in the system. In one embodiment, an audio module 110 of a center channel speaker 702 "include[s] sound processing logic which identifies the audio channels in the audio signal 108" and "processes the audio signal 108 into the selected channel configuration." McCarty, 9:6-13; 14:55-67.

However, contrary to the suggestion in the Office Action, McCarty does not describe the center channel speaker 702 (or the audio module 110 component thereof) making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims. Instead, McCarty's center channel speaker 702 merely processes the audio signal that it receives.

And when it receives multi-channel home theater audio, McCarty's center channel speaker 702 wirelessly broadcasts the subwoofer and rear left/right channels for receipt by any subwoofer and/or rear left/right speakers. McCarty, 9:6:67. McCarty discloses that the center channel speaker 702 plays the audio information for the center channel speaker 702, and does not include any disclosure of the center channel speaker 702 changing its configuration after determining that it is or is not "paired" with another device. Thus, McCarty does not disclose that the center channel speaker 702 may alter its output of audio after determining whether or not the center channel speaker is "paired" with another device such as subwoofer 132 and/or rear channels 144, 138.

Because McCarty does not disclose or suggest "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in the first instance, McCarty cannot possibly disclose or suggest the claimed features that logically flow from that determination step, i.e., the "playback device…(ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is paired with the one or more other playback devices."

B. DME fails to teach or suggest the determining, configuring, and changing elements recited in the claims

DME discloses a "DME Designer application" that runs on a computer and controls DME Units. DME, Ch. 2, pp. 24-28 ("DME Designer Overview"). Using the DME Designer application, "[m]ultiple zones can be created for an area, multiple device groups can be created for a zone, and multiple configurations can be created for a device group." DME, Ch. 4, p. 181 ("New Configurations"). These zones, areas, and device groups of DME units can be configured to play mono and stereo content. DME, Ch. 6, p. 443 ("Room Combiner").

However, contrary to the suggestion in the Office Action, DME does not describe a DME Unit making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims. Indeed, nothing in Applicant's review of DME found any disclosure or suggestion that an individual DME Unit has any ability to determine whether it is or is not "paired" such that it has a playback role that is different from a playback role of one or more other DME Units. Instead, each DME Unit simply executes configuration instructions provided by the DME Designer without any knowledge of its playback role -- let alone any determination of whether or not it is paired such that it has a playback role different from any other DME Unit in the network. See, e.g., DME, Ch. 2, p. 40 ("DME Data Import" describing loading configuration files from the DME Designer to a DME Unit for activation). Accordingly, no DME Unit "determine[s]" whether it is "either (a)…not paired…or (b) …is paired" with any other DME Unit.

Because DME does not disclose or suggest "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in the first instance, DME cannot possibly disclose or suggest the claimed features that logically flow from that determination step, i.e., the "playback device…(ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers after the playback device has determined it is paired with the one or more other playback devices.".

C. The claims are patentable over McCarty and DME

In view of the foregoing, and as agreed during the above-described examiner interview, independent claim 1 is patentable over McCarty and Crutchfield for at least the reason that McCarty and Crutchfield fail to disclose or suggest all the elements recited in the claims. Independent claims 17 and 19 recite similar elements to independent claim 1, so independent claims 17 and 19 are also patentable over McCarty and Crutchfield for similar reasons as claim 1. Further, and without conceding the merits of the other assertions in the Office Action, the pending dependent claims are patentable over McCarty and Crutchfield for at least the reason that they depend from patentable independent claims.

V. Conclusions

Applicant submits that the claims are in condition for allowance and Applicant requests a Notice of Allowance. If further dialog would advance prosecution, Applicant invites the Office to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: December 4, 2020 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

CLAIM AMENDMENTS

1. (Currently Amended) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers [[when]] after the playback device has determined it is not paired with the one or more other playback devices, and (iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers [[when]] after the playback device has determined it is paired with the one or more other playback devices.

2. (Previously Presented) The playback device of claim 1, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Canceled)

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the

playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on

audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

[[when]] after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

[[when]] after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers.

18. (Previously Presented) The method of claim 17, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies

based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

[[when]] after the playback device has determined it is not paired with the one or more other playback devices, configuring the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

[[when]] after the playback device has determined it is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers.

20. (Previously Presented) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

21. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

22. (Previously Presented) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

23. (Previously Presented). The tangible, non-transitory computer-readable media of claim 19, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least

one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

24. (Previously Presented) The tangible, non-transitory computer-readable media of claim 23, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/670,109	Filing Date 10/31/2019	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $100 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $460 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	12/04/2020	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 23	Minus	** 23	= 0		x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $480 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/ALLYSON PURNELL/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	None				

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	1	None						

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	Final Office Action mailed on 26 October 2020, issued in connection with U.S. Patent Application No. 16/297991, filed on 11 March 2019, 16 pages.	
	2	RF-RBWS02 Wireless Outdoor Speaker, Quick Setup Guide, RocketBoost Wireless, 2010, 4 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	3	Rocketfish - Rocket Boost Wireless, 13pages [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020] .	
	4	Rocketfish. Manuals & Support, RF-RBWS02, 10 October 2010, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	5	Rocketfish. Wireless Outdoor Speaker RF-RBWS02, Quick Setup Guide, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	6	Search Results for Rocketfish Outdoor Wireless Speaker pdf, Google.com, 2 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	
	7	Sonos, Inc. v. Google LLC, Expert Report of Dr. Kevin Jeffay, PH.D., Regarding the Invalidity of U.S. Patent No. 9,219,959 [Redacted] dated 23 October 2020, 195 pages.	
	8	Sonos, Inc. v. Google LLC. Respondents' Final Invalidity Claims Charts for US Patent 9,219,959, Exhibits 1-9 and B, dated 4 September 2020, 525 pages.	
	9	Wireless Speakers. Best Buy, 4 March 2010, 4 pages. [produced by Google in Inv. No. 337-TA-1191 on September 4, 2020].	

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-12-02
Name/Print	Brandon J. Kennedy	Registration Number	67,894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal					
Application Number:	16670109				
Filing Date:	31-Oct-2019				
Title of Invention:	Playback Device Pairing				
First Named Inventor/Applicant Name:	Christopher Kallai				
Filer:	Brandon Jacob Kennedy/Jaden Knosher				
Attorney Docket Number:	11-0401-CON1019A /15-1432				
Filed as Large Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		**Fee Code**	**Quantity**	**Amount**	**Sub-Total in USD($)**
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	260	260
		Total in USD ($)		**260**

Electronic Acknowledgement Receipt	
EFS ID:	41278679
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	02-DEC-2020
Filing Date:	31-OCT-2019
Time Stamp:	23:33:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$260
RAM confirmation Number	E2020B2N33583002
Deposit Account	506632
Authorized User	Brandon Kennedy
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS_Transmittal.pdf	83043 62072c0782fca2378149ff9e50f1a7a515507075	no	1
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11_0401_CON1019A_0_IDS_20201202141637.pdf	1053846 5be65a8cb0fd60078fc7ba24b94efafcd492b46d	no	5
Warnings:					
Information:					
3	Non Patent Literature	16297991_FOA_11-0101-CON0319_10-26-20_16pages.pdf	522703 964226cb24349484ad2fa234b1d0ea8656e8f710	no	16
Warnings:					
Information:					
4	Non Patent Literature	Wireless_Outdoor_Speaker_Quick_Setup_Guide_2010_4pages.pdf	1469148 a591fc33a15620ff968be98497c8addf23c58da8	no	4
Warnings:					
Information:					
5	Non Patent Literature	Rocketfish_Rocket_Boost_Wireless_13pages.pdf	4029250 1d0bf6e09fb8f40364323e672230e0a86100b3ed	no	13
Warnings:					
Information:					
6	Non Patent Literature	Rocketfish_Manuals_and_Support_2pages.pdf	423013 d9840489cb3d9a79cd03fb96cd048f8951b0ebfb	no	2
Warnings:					
Information:					

7	Non Patent Literature	Rocketfish_Quick_Setup_Guide_2pages.pdf	808361 00605c971b351cc2fae6d2a68e8dd1da07fecd05	no	2
Warnings:					
Information:					
8	Non Patent Literature	Google_Search_Rocketfish_Outdoor_Wireless_Speakers_2pages.pdf	532889 105334cc981d9870bf0bae3ae06812c0f3bf03f8	no	2
Warnings:					
Information:					
9	Non Patent Literature	Sonos_v_Google_Expert_Report_of_Jeffay_959_10-23-20_195pgs.pdf	6303406 7d3bb10c71b66da1bfd704bf9673c2507e7c1e82	no	195
Warnings:					
Information:					
10	Non Patent Literature	Wireless_Speakers_Best_Buy_4pages.pdf	1176812 40ec86a6fcb37b9cf15574ffa692c33b61d98fc4	no	4
Warnings:					
Information:					
11	Non Patent Literature	Sonos_v_Google_Final_Invalidity_Charts_959_ex_1-9_and_B_525pgs.pdf	13140936 12d244bc9cc71f9561b7e49695933869be5008f9	no	525
Warnings:					
Information:					
12	Fee Worksheet (SB06)	fee-info.pdf	30588 0e585dcd4866a01798d012a80b495052b43f0720	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	29573995		

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: MCCORD, Paul C.**
Confirmation No. 2699	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: December 2, 2020

By: /Brandon J. Kennedy/
Brandon J. Kennedy
Reg. No. 67,894
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9315
kennedy@ls3ip.com

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 11/23/2020

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EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

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11/23/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.		
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (First Inventor to File) Status** No	**Page** 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
PAUL C MCCORD	Primary Examiner	Telephonic
JEFFREY ARMSTRONG	Attorney of Record	

Date of Interview: 20 November 2020

Issues Discussed:

35 U.S.C. 103

Applicant presented arguments and proposed claim amendments which suffice to obviate the rejection of record

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

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November 19, 2020

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Examiner Paul McCord
U.S. Patent & Trademark Office
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RE: Agenda for App. 16/670,109 (Sonos 11-0401-CON1019A; MBHB 15-1432-US-CON5)

Examiner McCord:

Thank you for agreeing to interview the above-referenced application. An agenda of topics is outlined below.

Agenda for the Examiner Interview:

I. Clarifications regarding the "determining" element the 26-Oct-2020 Final Office Action
II. Proposed Amendments
    - Claim 1
III. Arguments for Consideration
    - U.S. Pat. 7,483,538 (McCarty) lacks the determining, configuring, and changing elements
        - No device in McCarty determines whether it is paired with any other device for playback, so no device in McCarty performs the configuring or changing features based on the determining features
    - Yamaha DME Designer (DME) lacks the determining, configuring, and changing elements
        - No device in DME determines whether it is paired with any other device for playback, so no device in DME performs the configuring or changing features based on the determining features

I. Clarifications regarding "determining" element in the 26-Oct-2020 Final Office Action

The 26-Oct-2020 Final Office Action includes confusing and contradictory statements regarding the "determining" element that Applicant would like to clarify before filing an After Final Response or a Notice of Appeal.

First, the statements in the Response to Arguments portion of the Final Office Action contradicts the record. The Final Office Action states:

> ***Response to Arguments***
>
> Applicant's arguments with respect to claim(s) 1, 17, 19 have been considered but are moot because the new ground of rejection does not rely on any reference applied in the prior rejection of record for any teaching or matter specifically challenged in the argument.

26-Oct-2020 Final Office Action, p. 15 ("Response to Arguments"). However, the 26-Oct-2020 Final Office Action and the 09-Jul-2020 Non-Final Office Action cite the ***same*** passages of McCarty for the "determining" element. In particular, compare p. 4 of the 26-Oct-2020 Final Office Action addressing the "determining" element with p. 5 of the 09-Jul-2020 Non-Final Office Action addressing the "determining" element.

26-Oct-2020 Final Office Action, p. 4	09-Jul-2020, Non-Final Office Action, p. 5
determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: Mcc determines a configuration, type of pairing, etc. determined based upon audio format available which configures corresponding speaker number, equalization, volume, etc.),	(ii) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: type of pairing determined based upon audio format available which configures corresponding speaker number, equalization, volume, etc.),

Applicant's 07-Oct-2020 Response at pp. 12-13 explained why McCarty fails to teach or suggest at least the "determining" element. So, ***it's not clear from the Final Office Action whether the Office considered Applicant's arguments in the 07-Oct-2020 Response regarding the "determining" element***.

Further adding to the confusion surrounding the "determining" element, the 26-Oct-2020 Final Office Action cites passages of McCarty that allegedly disclose the "determining" element, but later states McCarty does not disclose the "determining" element.

In particular, compare the passages at p. 4 of the 26-Oct-2020 Final Office Action alleging that McCarty discloses the "determining" element with passages at p. 5 of the 26-Oct-2020 Final Office Action acknowledging that McCarty fails to disclose the "determining" element.

09-Jul-2020, Non-Final Office Action, p. 4	09-Jul-2020, Non-Final Office Action, p. 5
determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: Mcc determines a configuration, type of pairing, etc. determined based upon audio format available which configures corresponding speaker number, equalization, volume, etc.),	57, 8:21-31, 11:5-12:60; shared to 2.1, 3.1 etc. configurations). Nevertheless, Mcc does not explicitly teach the recited configuration of a first and subsequent second processing based on the detection, determination, etc. of a particular pairing. Further Mcc strongly suggests playback devices initially configured to amplify/output a stereo, two-channel signal and route/transmit a one-channel signal and selectably operable to amplify/output one channel and route/transmit a two-channel signal (Mcc: Col 2:16-3:15) but does not discuss a playback device operable to determine signal processing and routing based on a determined role, channel configuration, pairing, etc. of the playback device(s).

Because Applicant's 07-Oct-2020 Response at pp. 12-13 explained why McCarty fails to teach or suggest at least the "determining" element, and because the Final Office Action is not clear as to whether the Office considered those arguments and whether or the extent to which the Office agrees that McCarty fails to disclose the "determining" element, Applicant seeks further clarification before filing an After Final Response and/or Notice of Appeal.

II. Proposed Amendments

Without conceding the merits of the rejection, and solely to attempt to advance prosecution, Applicant submits the following amendments for consideration.

1. (Proposed Amendment) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is not paired with the one or more other playback devices, and (iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is paired with the one or more other playback devices.

III. Arguments for Consideration

McCarty and DME, individually or in combination, fail to teach or suggest at least "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback

device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is paired with the one or more other playback devices."

A. McCarty fails to teach or suggest the determining, configuring, and changing elements recited in the claims

McCarty discloses a surround sound system with a center channel speaker that distributes audio content to other speakers in the system. In one embodiment, an audio module 110 of a center channel speaker 702 "include[s] sound processing logic which identifies the audio channels in the audio signal 108" and "processes the audio signal 108 into the selected channel configuration." McCarty, 9:6-13; 14:55-67.

However, contrary to the suggestion in the Office Action, McCarty does not describe the center channel speaker 702 (or the audio module 110 component thereof) making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims. Instead, McCarty's center channel speaker 702 merely processes the audio signal that it receives. And when it receives multi-channel home theater home audio, McCarty's center channel speaker 702 wirelessly broadcasts the subwoofer and rear left/right channels for receipt by any subwoofer and/or rear left/right speakers. McCarty, 9:6:67. McCarty's center channel speaker 702 plays the audio information for the center channel speaker 702 regardless of whether the subwoofer 132 and/or rear channels 144, 138 are present or not; the center channel speaker 702 does not alter its playback of audio based on whether the subwoofer 132 and/or rear channels 144, 138 are present.

Because McCarty does not disclose or suggest "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in the first instance, McCarty cannot possibly disclose or suggest the claimed features that logically flow from that determination step, i.e., the "playback device…(ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is paired with the one or more other playback devices."

B. DME fails to teach or suggest the determining, configuring, and changing elements recited in the claims

DME discloses a "DME Designer application" that runs on a computer and controls DME Units. DME, Ch. 2, pp. 24-28 ("DME Designer Overview"). Using the DME Designer application,

"[m]ultiple zones can be created for an area, multiple device groups can be created for a zone, and multiple configurations can be created for a device group." DME, Ch. 4, p. 181 ("New Configurations"). These zones, areas, and device groups of DME units can be configured to play mono and stereo content. DME, Ch. 6, p. 443 ("Room Combiner").

However, contrary to the suggestion in the Office Action, DME does not describe a DME Unit making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims. Indeed, nothing in Applicant's review of DME found any disclosure or suggestion that an individual DME Unit has any awareness of whether it is or is not "paired" with one or more other DME Units having different playback roles. Instead, each DME Unit simply executes configuration instructions provided by the DME Designer without any knowledge of its relationship (if any) with any other DME Unit in the network. See, e.g., DME, Ch. 2, p. 40 ("DME Data Import" describing loading configuration files from the DME Designer to a DME Unit for activation). And because no DME Unit has any knowledge of its relationship (if any) with any other DME Unit in the network, no DME Unit "determine[s]" whether it is "either (a)…not paired…or (b) …is paired" with any other DME Unit.

Because DME does not disclose or suggest "a playback device…(i) determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in the first instance, DME cannot possibly disclose or suggest the claimed features that logically flow from that determination step, i.e., the "playback device…(ii) configur[ing] the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is not paired with the one or more other playback devices, and (iii) chang[ing] the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers when the playback device has determined it is paired with the one or more other playback devices."

If you have questions, or if you would like additional information to prepare for the interview, please feel free to call me.

Best regards,



Jeff Armstrong
312-952-6826 (mobile)

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EXAMINER	
MCCORD, PAUL C	

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Applicant-Initiated Interview Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.		
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (First Inventor to File) Status** No	**Page** 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	**Title**	**Type**
PAUL C MCCORD	Primary Examiner	Telephonic
JEFFREY ARMSTRONG	Attorney of Record	

Date of Interview: 29 October 2020

Issues Discussed:

35 U.S.C. 103

Applicant discussed manner in which the claims may be amended to feature over the prior art rejection

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

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Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

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Office Action Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.	
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (FITF) Status** No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 10/07/2020.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☑ This action is **FINAL.** 2b) ☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-3 and 5-24 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-3 and 5-24 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☑ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Priority

In the interview of 8/17/20 Examiner accepted Applicant's opinion that the claims are entitled to the April 8, 2011 priority date of U.S. App. 13/083,499.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In the event the application names joint inventors, in considering patentability of the claims under pre-AIA 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of pre-AIA 35 U.S.C. 103(c) and potential pre-AIA 35 U.S.C. 102(e), (f) or (g) prior art under pre-AIA 35 U.S.C. 103(a).

Claims 1-3, 5-24 rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over McCarty: 7483538 hereinafter Mcc further in view of Yamaha DME designer (DME designer manual copyright 2004 provided by Examiner and hereinafter DME).

Regarding claim 1, 17, 19

Mcc teaches:

A playback device, method and medium bearing coded instructions (Mcc: Abstract: Col 9:6-9:25: audio communication system for routing; of audio across a network) comprising and/or operative of:

a network interface configured to receive audio data over a network (Mcc: Col 9:6-57, 14:58-67; Fig 1C, 2, 7, 8: system comprises an interface to send/receive audio over a local wired or wireless audio network);

one or more speaker drivers configured to output audio based on the audio data (Mcc: Col 12:15-24, 15:26-33; Fig 1C, 2, 7, 8: plurality of speaker drivers operable upon the audio network to output audio);

one or more processors; and tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to (Mcc: Col 9:6-57, 11:5-12:7; Fig 1C, 2, 7, 8: sound processing logic and/or DSP operable to process the audio signal for output)

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; (Mcc: Col 9:6-57, 11:5-12:7; Fig 1C, 2, 7, 8: an available audio format directs a particular pairing of available speakers based on channel configuration and control information);

and

determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: Mcc determines a configuration, type of pairing, etc. determined based upon audio format available which configures corresponding speaker number, equalization, volume, etc.),

(ii) configure the playback device to perform a first processing, equalization, etc. of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices (Mcc: Col 9:6-57, 8:21-31, 11:5-12:60; Fig 1C, 2, 7, 8: equalization parameters determined in concert with a type of pairing determined by audio format), and

(iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on

the audio data from the one or more speaker drivers when the playback device is paired with the one or more other playback devices.

Mcc is considered to strongly suggest operations determining particular output configurations operable by adjusting a first, second processing such as routing, equalization, etc. based thereon (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: processing logic, DSP, etc. process audio signal into particular channel configuration, equalization, volume, etc. for output) but does not clearly disclose a change of a first particular processing to a second particular processing based on particular determined configuration changes, groupings, pairings, etc. among particular playback devices. Mcc is considered to strongly suggest such a change based on the disclosed relationship of the system with a subwoofer. That is, changing from the disclosed stereo configuration to any of the disclosed subwoofer inclusive pairings would mandate the inclusion of at least a low pass equalization processing for at least the subwoofer channel, as such subwoofer equalization processing strongly suggests accompanying equalization for any of the speakers in a subwoofer inclusive pairing (see at least Mcc: Col 9:6-57, 8:21-31, 11:5-12:60: stereo to 2.1, 3.1 etc. configurations). Nevertheless, Mcc does not explicitly teach the recited configuration of a first and subsequent second processing based on the detection, determination, etc. of a particular pairing.

Further Mcc strongly suggests playback devices initially configured to amplify/output a stereo, two-channel signal and route/transmit a one-channel signal and selectably operable to amplify/output one channel and route/transmit a two-channel signal (Mcc: Col 2:16-3:15) but does not discuss a playback device operable to determine signal processing and routing based on a determined role, channel configuration, pairing, etc. of the playback device(s).

In a related field of endeavor DME teaches a networked playback device, method and medium bearing coded instructions comprising and operative of plural independently operable

processors which configure each/any playback device upon the network (DME: 3-9, 421-449, 495-505; Ch 4, 6) to:

receive instructions for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles, instantiate different playback channel routings and/or perform different subsets of available processing (DME: 3-9, 421-449, 495-505; Ch 4, 6: each/any device operative to process particular subsets audio channels and direct said channels particular outputs upon the device); and

(i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles (DME: 3-9, 421-449, 495-505; Ch 4, 6: system determines playback roles of devices by instantiation of particular processing scenes),

(ii) configure the playback device to perform a first processing of the audio data so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by use of any among the available mixer and router modules, prototypes, etc. perform the routings claimed), and

(iii) change the configuration of the playback device by configuring the playback device to perform a second processing of the audio data so as to output one-channel audio based on the audio data from the one or more speaker drivers when the playback device is paired with the one or more other playback devices (DME: 3-9, 421-449, 495-505; Ch 4, 6: each any invoked scene operates available mixer and router modules, prototypes, etc. perform the routings claimed and switchable determine alternate routings). It would have been obvious to one of

ordinary skill in the art before the effective filing date of the instant application to equip each/any of the Mcc playback devices to utilize the various DME taught signal processing modules operable based on at least user determined pairings input into a controller or playback device within the Mcc device and method. The average skilled practitioner would have been motivated to do so for the purpose of performing user directed signal processing on an audio channel or channels and would have expected only predictable results therefrom.

Regarding claim 2, 18, 20

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein performing the first processing further comprises utilizing at least a first one or more parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second processing further comprises utilizing at least a second one or more parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a selection and subsequent selection of a particular media accesses configuration data and/or subsequent configuration data comprising control information which effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying and/or equalizing particular channels of audio); (DME: pp 403-417: a variety of signal processing modules, routines, code snippets, etc. operable to instantiate pass filters into a signal path).

Regarding claim 3

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: pairing comprise stereo, 2.1, 3.1 etc. comprising two or more playback devices); (DME: 3-9, 421-449, 495-505; Ch 4, 6 user interface directs various pairings instantiated over a network upon the constellation of available players)

Regarding claim 5

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: system operates in stereo and/or a surround type mode such as 3.1, 5.1, etc.); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 6

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: system operates in stereo and/or a surround type mode such as 3.1, 5.1, etc.); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 7

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data. Examiner has taken official notice which Applicant has failed to timely traverse and it is thus accepted as Applicant's Admitted Prior Art (AAPA: please see MPEP 2144.03) a "mono" button would have comprised an obvious inclusion.

Regarding claim 8

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the network is a wireless network (Mcc: Abstract: system comprises wireless communication between a plurality of system elements said elements comprising wirelessly implemented speakers).

Regarding claim 9

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to: output audio from the plurality of speaker drivers. (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a plurality of speaker configurations each comprising a plurality of speaker drivers); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 10

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 11

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based

on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 12

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 13

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 14

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: an additional or subsequent configuration data comprising control information effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: a selection of a particular one of various user or system directed pairings, configurations, etc. instantiates and operates the system to route audio from particular channels in a designated audio configuration for output).

Regarding claim 15

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: detect a predefined event; and interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected. (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a predefined event in the form of reading or otherwise identifying audio channel format data or configuration data comprising control information effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: a predefined event comprising selection of a particular one of various user or system directed pairings, configurations, etc. and/or the occurrence of a preset timing instantiates and operates the system to output audio from particular channels in a designated audio configuration).

Regarding claim 16

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices. (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: an additional or subsequent configuration data comprising control information effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately

amplifying particular channels of audio); (DME: 3-9, 421-449, 495-505; Ch 4, 6: a subsequent selection of a particular additional user or system directed pairing, configuration, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).

Regarding claim 21, 23

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by instantiation of a EQ module comprising particular parameters), (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by instantiation of mixer module comprising particular parameters), or (v) changing an amplifier gain of an amplifier of the playback device (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by instantiation of mixer module comprising particular parameters).

Regarding claim 22, 24

Mcc in view of DME teaches or suggests:

A playback device, method and medium, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by instantiation of a EQ module comprising particular parameters), (ii) adjusting a phase for the audio data (DME: 3-9, 421-449,

495-505; Ch 4, 6: such as by instantiation of a crossover, equalizer, fader, etc. module comprising particular parameters), or (iii) adjusting a time-delay for the audio data (DME: 3-9, 421-449, 495-505; Ch 4, 6: such as by instantiation of a delay module comprising particular parameters).

Response to Arguments

Applicant's arguments with respect to claim(s) 1, 17, 19 have been considered but are moot because the new ground of rejection does not rely on any reference applied in the prior rejection of record for any teaching or matter specifically challenged in the argument.

Conclusion

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL C MCCORD whose telephone number is (571)270-3701. The examiner can normally be reached on 730-630 M-F.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on 5712727848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-my.uspto.gov/pair/PrivatePair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Applicant-Initiated Interview Summary	Application No. 16/670,109	Applicant(s) Kallai et al.		
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (First Inventor to File) Status No	Page 1 of 1

All Participants (applicant, applicants representative, PTO personnel)	Title	Type
PAUL C MCCORD	Primary Examiner	Telephonic
JEFF ARMSTRONG	Attorney of Record	

Date of Interview: 21 October 2020

Issues Discussed:

35 U.S.C. 103

Applicant called to explain the 10/07/2020 replacement response to the 8/31/2020 filing due to the narrowing court construal of the claimed equalization.

Priority Claim(s)

Applicant called to clarify the appropriate priority date for the application as 4/8/2011

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Applicant is reminded that a complete written statement as to the substance of the interview must be made of record in the application file. It is the applicants responsibility to provide the written statement, unless the interview was initiated by the Examiner and the Examiner has indicated that a written summary will be provided. See MPEP 713.04
Please further see:
MPEP 713.04
Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews, paragraph (b)
37 CFR § 1.2 Business to be transacted in writing

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04R3/12	01/27/2020	pm
G06F3/165	01/27/2020	pm
H03G3/20,3005	01/27/2020	pm
H03G5/165	01/27/2020	pm
H04R5/04	01/27/2020	pm
H04R27/00	01/27/2020	pm
H04S7/30	01/27/2020	pm
H04R2227/003,005	01/27/2020	pm
H04R2420/01,07	01/27/2020	pm
H04S2400/01	01/27/2020	pm

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
700	94	01/27/2020	pm

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

Search Notes		
Search Notes	**Date**	**Examiner**
East text search H04R3/12	10/23/2020	pm
East text search G06F3/165	10/23/2020	pm
East text search H03G3/20,3005	10/23/2020	pm
East text search H03G5/165	10/23/2020	pm
East text search H04R5/04	10/23/2020	pm
East text search H04R27/00	10/23/2020	pm
East text search H04S7/30	10/23/2020	pm
East text search H04R2227/003,005	10/23/2020	pm
East text search H04R2420/01,07	10/23/2020	pm
East text search H04S2400/01	10/23/2020	pm
East text search 700/94	10/23/2020	pm
Inventor, Assignee name search	10/23/2020	pm
East text search CPC and USPC datasets	10/23/2020	pm
Google patent search	10/23/2020	pm
IP.com patent search	10/23/2020	pm
Claims, priority consultation Dan Swerdlow	10/23/2020	pm

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
please see above class search		10/23/2020	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant				☐ CPA		☐ T.D.		☐ R.1.47		
CLAIM		**DATE**								
Final	Original	07/06/2020	10/23/2020							
	1	✓	✓							
	2	✓	✓							
	3	✓	✓							
	4	✓	-							
	5	✓	✓							
	6	✓	✓							
	7	✓	✓							
	8	✓	✓							
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	23		✓							
	24		✓							

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	Christopher Kallai
Art Unit	2654
Examiner Name	Paul C. McCord
Attorney Docket Number	11-0401-CON1019A

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	Christopher Kallai
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0401-CON1019A

	1	Sonos, Inc. v. Google LLC. Order 20: Construing the Terms of the Asserted Claims of the Patents at Issue dated 25 September 2020, 53 pages.	

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EXAMINER SIGNATURE

Examiner Signature	/PAUL C MCCORD/ 10/14/2020	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	Christopher Kallai
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-10-13
Name/Print	Brandon J. Kennedy	Registration Number	67894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

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See attached certification statement.

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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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Attorney Docket Number	11-0401-CON1019A

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Signature	/David R. Grosby/	Date (YYYY-MM-DD)	2020-07-30
Name/Print	David R. Grosby	Registration Number	75,912

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

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First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

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CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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Name/Print	Zuha S. Irfan	Registration Number	72387

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

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The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

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A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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	1	20030215097		2003-11-20	CRUTCHFIELD; William G. Jr.	

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	9	Sonos, Inc. v. Google LLC. Respondents' Final Invalidity Contentions [Redacted] dated 4 September 2020, 261 pages.	

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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-10-02
Name/Print	Brandon J. Kennedy	Registration Number	67,894

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	34	NewsRoom. Miller, M., Adapted for flight: hands-on trial: wireless media adapters send digital entertainment soaring from PC to living room. 18 September 2003, 3 pages.	
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	45	NewsRoom. Norris, A., Come over to my house. 23 January 2003, 3 pages.	
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Examiner Signature	/PAUL C MCCORD/ 10/14/2020	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	16	"670109".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:50
L2	2	"20200084545"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:51
L3	21,835	((G06F3/165 OR G06F3/16 OR G06F3/162).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:51
L4	92,448	((G06F16/433 OR G06F3/0482 OR G06F3/04842).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:52
L5	2,523	3 and 4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:52
L6	11,287	((H04R5/04 OR H04R2227/003 OR H04R2227/005 OR H04R2420/01).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:52
L7	2,533	3 and 6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:52
L8	434	4 and 6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:52
L9	371	5 and 6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:53
L10	22,431	((H04R27/00 OR H04R3/12 OR H04R2420/07 OR H04R2430/01).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:53
L11	6,275	((H04R3/12).CPC.)	US-PGPUB; USPAT;	OR	ON	2020/10/23 13:53

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L12	220	11 and 5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:53
L13	2,169	11 and 6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:53
L14	196	12 and 13	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:53
L15	458	((H03G1/02).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:54
L16	71	((H03G1/02).CPC.) and (5 6 11)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:54
L17	6,752	((H03G3/20 OR H03G3/3005 OR H03G5/165 OR H03G1/02 OR H03G7/00).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:54
L18	800	((H04S7/308).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:55
L19	31,948	((H04S7/308 OR H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/8106).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:59
L20	1,382	((H04N21/4852).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:59
L21	31,208	((H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/8106).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:59
L22	32,106	((H04N21/4307 OR H04N21/43615 OR H04N21/43637 OR H04N21/4852 OR H04N21/8106).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 13:59

L23	16	20 and 18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:00
L24	10	sonos.as,aanm. and @pd<="20100408" and (sync synchron$9) and group$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:11
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L26	101	25 and (15 16)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:17
L27	22,788	25 (15 16)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:22
L28	22,431	25 (15 16) and 18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:22
L29	328	(25 (15 16)) and 18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:22
L30	2,166	(25 (15 16) 19 21 22) and (20 18)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:23
L31	16	(25 (15 16) 19 21 22) and (20 and 18)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:23
L32	2,166	(25 (15 16) 19 21 22) and (20 18)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/23 14:23
S1	10	"564302".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/17 19:26
S2	26	mccord and dolby	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/17 19:30

S3	16	mccord.xp. and dolby	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/17 19:30
S4	2	mccord.xp. and dolby.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/17 19:30
S5	5	mccord.xp. and google.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/17 19:31
S6	15	("20040181394" | "20050270938" | "20070073718" | "20070274383" | "20080144713" | "20090219994" | "20120083910" | "6393398" | "6973428" | "7027987" | "7143432" | "7526348" | "7729917" | "7870562" | "8102916").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:31
S7	5	hd$3audio$3.oref.	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:34
S8	0	hd$3audio$3.oref. and trash	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:35
S9	0	hd$3audio$3 and trash	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:35
S10	10	hd$3audio$3 and releas$6	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:35
S11	4	hd$3audio$3 and releas$6 same (memory buffer$5 register)	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:35
S12	573	(DMA same audio hd$3audio$3) and releas$6 same (memory buffer$5 register)	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:37
S13	361	(DMA with audio hd$3audio$3) and releas$6 same (memory buffer$5 register)	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/17 19:37
S14	10	"495595".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:28
S15	26,252	(g06f3/165 g05b15/02 h04l65/403).cpc. 700/94.ccls.	US-PGPUB; USPAT;	OR	ON	2016/03/21 09:32

			EPO; JPO; DERWENT			
S16	882	S15 and (collaborat$6 social$6) near2 media	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:33
S17	966	S15 and (collaborat$6 social$6) near2 (play$3list$4 media history)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:33
S18	1,047	S15 and (collaborat$6 social$6 synchron$9) near2 (play$3list$4 media history) and second	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:34
S19	756	S15 and (collaborat$6 social$6 synchron$9) near2 (play$3list$4 media history) and second near6 (device user player)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:34
S20	145	("20020026442" | "20020124097" | "20040088328" | "20070088747" | "20100262909" | "20140096219" | "6757517" | "7130616" | "7496623" | "7657224" | "7865137" | "8234395" | "8103009" | "20100017366" | "20130073584" | "20130173034" | "6404811" | "6778869" | "7130608" | "7917082" | "8028323" | "8990701" | "20130254663" | "20130343567" | "20030157951" | "20060253436" | "6349339" | "7657910" | "7916877" | "8028038" | "20080052371" | "20120071996" | "5923902" | "6631410" | "6826283" | "6985694" | "7599685" | "7739271" | "7483538" | "20140244863" | "20040024478" | "20100205222" | "6108686" | "6256554" | "7143939" | "7236773" | "7725533" | "7742740" | "8214873" | "20110314388" | "20020056117" | "6522886" | "7236739" | "7496633" | "7835689" | "8014423" | "8045952" | "8050652" | "20130198633" | "20130191454" | "20010042107" | "20070142944" | "20090307062" | "7124125" | "7725551" | "8023663" | "7853341" | "20100228740" | "20020022453" | "20070294131" | "20130346859" | "6611537" | "7571014" | "7643894" | "8230099").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:35

S21	1	S19 and S20	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:35
S22	756	S19 and S15	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:35
S23	644	S18 and (sync synchron$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:36
S24	6	"2013191454" "2011314388" "2013254663" "2010288740" "2013343567"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:37
S25	10	"20130191454" "20110314388" "20130254663" "20100288740" "20130343567"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:37
S26	167,467	((H04N21/4825 OR H04N21/8113 OR H04N21/41407 OR H04N21/4227 OR H04N21/4788 OR H04N21/632 OR H04N21/6581 OR H04N21/8352 OR H04N21/25816 OR G11B27/105 OR G11B27/034 OR G11B27/00 OR G06F17/30772 OR G06F3/0481 OR G06F17/00 OR G06F17/30743 OR H04L51/10 OR H04L51/18 OR H04L51/24 OR H04L51/32 OR H04L12/58 OR H04L29/08081 OR H04L29/08576 OR H04L67/14 OR H04R2227/005 OR H04R2227/003 OR H04R27/00 OR G02B26/101 OR G06Q10/00 OR G06Q10/10 OR G06Q10/101).CPC. OR (381/77 OR 709/204 OR 715/716 OR 715/751).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:38
S27	2	"20160011590"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:42
S28	9,006	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:42
S29	361,822	sensor with (touch proximity motion)	US-PGPUB; USPAT;	OR	ON	2016/03/21 09:42

			EPO; JPO; DERWENT			
S30	629	S28 and S29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:42
S31	74	("20020026442" | "20020124097" | "6757517" | "7130616" | "8103009" | "6404811" | "6778869" | "7130608" | "8234395" | "20130273869" | "20030157951" | "7657910" | "20140244013" | "5923902" | "6631410" | "7483538" | "7840740" | "20040024478" | "20110312349" | "6256554" | "7143939" | "7236773" | "6522886" | "8014423" | "8045952" | "20010042107" | "20070142944" | "7853341" | "20130202132" | "20020022453" | "6611537" | "7571014" | "7643894").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:44
S32	8	S29 and S31	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 09:44
S33	3	"20140244013"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:50
S34	145	("20020026442" | "20020124097" | "20040088328" | "20070088747" | "20100262909" | "20140096219" | "6757517" | "7130616" | "7496623" | "7657224" | "7865137" | "8234395" | "8103009" | "20100017366" | "20130073584" | "20130173034" | "6404811" | "6778869" | "7130608" | "7917082" | "8028323" | "8990701" | "20130254663" | "20130343567" | "20030157951" | "20060253436" | "6349339" | "7657910" | "7916877" | "8028038" | "20080052371" | "20120071996" | "5923902" | "6631410" | "6826283" | "6985694" | "7599685" | "7739271" | "7483538" | "20140244863" | "20040024478" | "20100205222" | "6108686" | "6256554" | "7143939" | "7236773" | "7725533" | "7742740" | "8214873" | "20110314388" | "20020056117" | "6522886" | "7236739" | "7496633" | "7835689" | "8014423" | "8045952" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:52

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S36	5	S34 and sensor with (operat$5 control$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:52
S37	10	zacchi and baudino and korhonen	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:54
S38	7	"2008007261"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:57
S39	2	"20080077261"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 10:57
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S41	3	"500465".ap. and grill	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/21 11:13
S42	211	("20020002039" | "20020072816" | "20020124097" | "20040117044" | "20050131558" | "20050254505" | "20070288610" | "20080066094" | "20080077261" | "20080144861" | "6587127" | "6604023" | "7742832" | "8234395" | "20020026442" | "6757517" | "7130616" | "8103009" | "20050021470" | "20060041616" | "20080025535" | "20080045140" | "6778869" | "7130608" | "7626952" | "8189824" | "6404811" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/08 15:02

		"20130103873" | "7558224" | "7761176" | "7962482" | "8700730" | "20030157951" | "7657910" | "20030167335" | "20060149402" | "20080066120" | "20090228919" | "6631410" | "7187947" | "7817960" | "5923902" | "7483538" | "8423893" | "20030020763" | "20030177889" | "20040223622" | "20050002535" | "20050289224" | "20070142022" | "5946343" | "7668990" | "20040024478" | "6256554" | "7143939" | "7236773" | "20020003548" | "20030198257" | "20040010727" | "20050289244" | "5182552" | "7218708" | "7805210" | "7849181" | "8045952" | "6522886" | "8014423" | "20140093085" | "20040225389" | "20070142944" | "20080152165" | "20080162668" | "20010042107" | "7853341" | "8762565" | "8965544" | "20040015252" | "20040131192" | "20050144284" | "20070189544" | "20090097672" | "7302468" | "7539551" | "7571014" | "7643894" | "8239559" | "8290603" | "8788080" | "20020022453" | "6611537").PN.				
S43	211	("20020002039" | "20020072816" | "20020124097" | "20040117044" | "20050131558" | "20050254505" | "20070288610" | "20080066094" | "20080077261" | "20080144861" | "6587127" | "6604023" | "7742832" | "8234395" | "20020026442" | "6757517" | "7130616" | "8103009" | "20050021470" | "20060041616" | "20080025535" | "20080045140" | "6778869" | "7130608" | "7626952" | "8189824" | "6404811" | "20130103873" | "7558224" | "7761176" | "7962482" | "8700730" | "20030157951" | "7657910" | "20030167335" | "20060149402" | "20080066120" | "20090228919" | "6631410" | "7187947" | "7817960" | "5923902" | "7483538" | "8423893" | "20030020763" | "20030177889" | "20040223622" | "20050002535" | "20050289224" | "20070142022" | "5946343" | "7668990" | "20040024478" | "6256554" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 11:47

		"7143939" | "7236773" | "20020003548" | "20030198257" | "20040010727" | "20050289244" | "5182552" | "7218708" | "7805210" | "7849181" | "8045952" | "6522886" | "8014423" | "20140093085" | "20040225389" | "20070142944" | "20080152165" | "20080162668" | "20010042107" | "7853341" | "8762565" | "8965544" | "20040015252" | "20040131192" | "20050144284" | "20070189544" | "20090097672" | "7302468" | "7539551" | "7571014" | "7643894" | "8239559" | "8290603" | "8788080" | "20020022453" | "6611537").PN.				
S44	6	"2014074089" "20130103873"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 11:48
S45	1	"20150286360" and (strength strong$6 power$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 11:50
S46	2	(synchron$6 sync) with $4group$5 same (strength and qos)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:03
S47	23	(synchron$6 sync) with $4group$5 and group$6 same (strength and qos)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:04
S48	1,115	(synchron$6 sync) with $4group$5 and group$6 same ((power strength) and (quality qos))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:05
S49	434	(synchron$6 sync) with $4group$5 and group$6 same ((power strength) same (quality qos))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:06
S50	81	(synchron$6 sync) with $4group$5 and group$6 same ((power strength) same (quality qos)) and play$6 near5 (media audio digital)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:07
S51	79	(synchron$6 sync) with $4group$5 and group$6 same ((power strength) same (quality qos)) and play$6 near5 (media audio digital) not S47	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:11

S52	14	S43 and strength	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:11
S53	0	S51 and S52	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:11
S54	12	"338710".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:12
S55	2	"20160026428"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:12
S56	28,538	((G06F3/165 OR H04L67/10).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:13
S57	50	S48 and S56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:13
S58	5	S51 and S57	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:13
S59	1	"20150286360" and (strength strong$6 power$4 proximi$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:51
S60	1	"20150286360" and (strength strong$6 power$4 proxim$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:51
S61	1	"20150286360" and (strength strong$6 power$4 proxim$6 near$5)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:52
S62	1	"20150286360" and (strength strong$6 power$4 proxim$6 ("near" close nearby))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 12:52
S63	211	("20020002039" | "20020072816" | "20020124097" | "20040117044" | "20050131558" | "20050254505" | "20070288610" | "20080066094" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 14:06

		"20080077261" | "20080144861" | "6587127" | "6604023" | "7742832" | "8234395" | "20020026442" | "6757517" | "7130616" | "8103009" | "20050021470" | "20060041616" | "20080025535" | "20080045140" | "6778869" | "7130608" | "7626952" | "8189824" | "6404811" | "20130103873" | "7558224" | "7761176" | "7962482" | "8700730" | "20030157951" | "7657910" | "20030167335" | "20060149402" | "20080066120" | "20090228919" | "6631410" | "7187947" | "7817960" | "5923902" | "7483538" | "8423893" | "20030020763" | "20030177889" | "20040223622" | "20050002535" | "20050289224" | "20070142022" | "5946343" | "7668990" | "20040024478" | "6256554" | "7143939" | "7236773" | "20020003548" | "20030198257" | "20040010727" | "20050289244" | "5182552" | "7218708" | "7805210" | "7849181" | "8045952" | "6522886" | "8014423" | "20140093085" | "20040225389" | "20070142944" | "20080152165" | "20080162668" | "20010042107" | "7853341" | "8762565" | "8965544" | "20040015252" | "20040131192" | "20050144284" | "20070189544" | "20090097672" | "7302468" | "7539551" | "7571014" | "7643894" | "8239559" | "8290603" | "8788080" | "20020022453" | "6611537").PN.				
S64	3	S63 and korhonen	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 14:06
S65	14	S63 and strength	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 14:06
S66	7	S63 and strength and master	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 14:07
S67	7	S63 and strength and (master head$3end)	US-PGPUB; USPAT;	OR	ON	2016/06/09 14:08

			EPO; JPO; DERWENT			
S68	13	baudino.in. and (group$5 shar$4).ab.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/09 19:50
S69	2	"500465".ap. and strength	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 09:57
S70	10	"500465".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 09:57
S71	2	"20160011590"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 09:57
S72	1	"20160011590" and gril$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 13:42
S73	3	"20110312319"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 13:47
S74	3	"20110312349"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 13:48
S75	1	"20160011590" and under$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 14:03
S76	58	("2011/0312349").URPN.	USPAT	OR	ON	2016/06/10 14:15
S77	43	S76 and orient$8	USPAT	OR	ON	2016/06/10 14:17
S78	7	("20100090564" | "8295879" | "7656393" | "8000736" | "6532375" | "20070259717" | "20030085870" | "20100321289" | "7957762" | "20110098061" | "20090262078" | "20090197615" | "20100083137" | "20020167488" | "20070075965" | "20080207254" | "20040263484" | "20100079395" | "20100081473" | "20100062833" | "20100078343" |	USPAT	OR	ON	2016/06/10 14:28

		"20100033424" | "5414444" | "20100103098" | "7010332" | "20100099456" | "20110004826").PN.				
S79	64	("20100090564" | "8295879" | "7656393" | "8000736" | "6532375" | "20070259717" | "20030085870" | "20100321289" | "7957762" | "20110098061" | "20090262078" | "20090197615" | "20100083137" | "20020167488" | "20070075965" | "20080207254" | "20040263484" | "20100079395" | "20100081473" | "20100062833" | "20100078343" | "20100033424" | "5414444" | "20100103098" | "7010332" | "20100099456" | "20110004826").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 14:28
S80	7	S79 and orient$8	USPAT	OR	ON	2016/06/10 14:28
S81	1,006	playback same orientation	USPAT	OR	ON	2016/06/10 14:29
S82	361	playback same orientation and (sync synchron$9)	USPAT	OR	ON	2016/06/10 14:29
S83	109	playback same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/10 14:40
S84	41	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040023697" | "20040024478" | "20050201549" | "20070003067" | "20070142944" | "20070265031" | "20080144864" | "20080146289" | "20110002487" | "20120051567" | "20130129122" | "4696037" | "5553147" | "5923902" | "6256554" | "6404811" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "6809635" | "6882335" | "7130608" | "7130616" | "7143939" | "7236773" | "7483538" | "7571014" | "7643894" | "7657910" | "7853341" | "8014423" | "8045952" | "8103009" | "8234395").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2016/06/10 14:42
S85	11	orient$6.clm. and sonos.as.	US-PGPUB; USPAT; USOCR	OR	ON	2016/06/10 14:55

S86	80	("20020026442" | "20020124097" | "6757517" | "7130616" | "8103009" | "20080077261" | "20080152165" | "6404811" | "6778869" | "7130608" | "8234395" | "20130273869" | "20030157951" | "7657910" | "20080045140" | "20140244013" | "5923902" | "6631410" | "7483538" | "7840740" | "20040024478" | "20110312349" | "6256554" | "7143939" | "7236773" | "20110312349" | "6522886" | "8014423" | "8045952" | "20010042107" | "20070142944" | "7853341" | "20130202132" | "20020022453" | "6611537" | "7571014" | "7643894").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/11 10:25
S87	10	"500465".ap.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/02 09:12
S88	1	"500465".ap. and playback adj device	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/02 09:12
S89	2,962	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. OR (700/94).CCLS.)	USPAT	OR	ON	2016/09/02 09:13
S90	1	"500465".ap. and motion	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/02 09:13
S91	1,036	playback same orientation	USPAT	OR	ON	2016/09/02 09:13
S92	2	("2016/0011590").URPN.	USPAT	OR	OFF	2016/09/02 09:16
S93	9	(US-20140357234-$ or US-20060123080-$ or US-20130022221-$ or US-20130287228-$).did. or (US-6785513-$ or US-9292045-$ or US-9030407-$ or US-9008725-$ or US-8811630-$).did.	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:17
S94	9	(US-20140357234-$ or US-20060123080-$ or US-20130022221-$ or US-20130287228-$).did. or (US-6785513-$ or US-9292045-$ or US-9030407-$ or US-9008725-$ or US-8811630-$).did.	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:17

S120	123	playback same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/02 12:20
S130	112	("20120220311" | "8175617" | "20100057231" | "20140108020" | "20110159921" | "9189783" | "20110208515" | "6519769" | "20130211662" | "5319735" | "5819155" | "7908133" | "8359205" | "20030231785" | "8103049" | "20110276157" | "20130019292" | "20150084900" | "5365586" | "20100316232" | "20140172435" | "20140324199" | "20110093878" | "20110184580" | "20130273941" | "5889548" | "20110098056" | "20130054603" | "9183552" | "20100223062" | "20120203363" | "20130009907" | "4038596" | "20090150217" | "6112053" | "20060203105" | "20110276333" | "9027048" | "20160021238" | "6724184" | "5481294" | "8369972" | "20050198505" | "20150201294" | "20130314214").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/16 11:38
S131	98	("20020026442" | "20020124097" | "6757517" | "7130616" | "8103009" | "20080077261" | "20080152165" | "6404811" | "6778869" | "7130608" | "8234395" | "20130273869" | "20030157951" | "7657910" | "20080045140" | "20130022221" | "20140244013" | "5923902" | "6631410" | "7483538" | "20060123080" | "8811630" | "7840740" | "20040024478" | "20110312349" | "6256554" | "7143939" | "7236773" | "20110312349" | "20130287228" | "6522886" | "8014423" | "8045952" | "9030407" | "20010042107" | "20070142944" | "7853341" | "20130202132" | "20020022453" | "6611537" | "7571014" | "7643894" | "9008725" | "9292045").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/16 11:39
S132	20,802	"s117"	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/16 13:00

S164	8	("6766028" | "20130279706" | "20130279706" | "20130129122" | "20080214160").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/17 09:27
S165	4	"2008104843"	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/17 09:31
S171	10	"500465".ap.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/19 08:42
S172	97	jbl.as.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/19 12:44
S173	103	jbl.as. james same lansing.as.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/19 12:44
S174	5,960	harman.as.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/19 12:46
S175	51	harman.as. and (700/94.ccls. "384".clas.)	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2016/09/19 12:46
S197	1	"500465".ap. and zone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 11:34
S198	10	"619813".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 13:09
S199	19	"8843224"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 13:14
S200	248	"20070087686" "2005013047" "7571014"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:17
S201	10	("20070087686" "2005013047" "7571014").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:18

S202	17,575,550	"7"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:19
S203	12	"816217".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:23
S204	20	"2015024881"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:41
S205	1,730	(method with generating with sound).ti.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:42
S206	2	(method with generating with sound).ti. and bang.as.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/02/16 14:42
S207	60	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20060124080" | "20070142944" | "20080045140" | "20080077261" | "20080152165" | "20080214160" | "20110002487" | "20110312349" | "20130022221" | "20130129122" | "20130202132" | "20130273869" | "20130279706" | "20130287228" | "20140086415" | "20140244013" | "20150181337" | "20160057555" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7840740" | "7853341" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8811630" | "8942252" | "9008725" | "9030407" | "9292045").PN.	US-PGPUB; USPAT	OR	ON	2018/06/02 15:44
S208	2	"20110312349" and speaker	US-PGPUB; USPAT	OR	ON	2018/06/02 15:45
S209	2	"20110312349" and "104"	US-PGPUB; USPAT	OR	ON	2018/06/02 15:46

S210	2	"20110312349" and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 15:52
S211	12	sonos.as. and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:21
S212	4	S207 and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:22
S213	90	("2011/0312349").URPN.	USPAT	OR	ON	2018/06/02 16:25
S214	3	S213 and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:25
S215	2	"20150126246" and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:26
S216	14	("20020021278" | "20090209293" | "20100159998" | "20110312349" | "20120258773" | "20130265284" | "20130300687" | "20140004907" | "20140078086" | "8311514" | "8446382" | "8810524").PN. OR ("9411446").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2018/06/02 16:26
S217	13	("20020021278" | "20090209293" | "20100159998" | "20110312349" | "20120258773" | "20130265284" | "20130300687" | "20140004907" | "20140078086" | "20150126246" | "8311514" | "8446382" | "8810524").PN. OR ("9727154").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2018/06/02 16:26
S218	72	S207 S217	US-PGPUB; USPAT; USOCR	OR	ON	2018/06/02 16:26
S219	15	S216 S217	US-PGPUB; USPAT; USOCR	OR	ON	2018/06/02 16:26
S220	4	S219 and volume same orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:26
S221	1	("2015/0126246").URPN.	USPAT	OR	ON	2018/06/02 16:29
S222	1,065	volume near3 control$6 with orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:29
S223	626	(media play$6) and volume near3 control$6 with orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:29
S224	526	($6media audio music play$6) and volume near3 control$6 with orient$8	US-PGPUB; USPAT	OR	ON	2018/06/02 16:29
S225	62	($6media audio music play$6) and volume near3 control$6 with orient$8 same sens$6	US-PGPUB; USPAT	OR	ON	2018/06/02 16:30

S226	20	"927876"	US-PGPUB; USPAT	OR	ON	2018/06/02 16:31
S227	9	"927876".ap.	US-PGPUB; USPAT	OR	ON	2018/06/02 16:31
S228	50	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did.	US-PGPUB; USPAT	OR	ON	2018/06/02 16:58
S229	2	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-	US-PGPUB; USPAT	OR	ON	2018/06/02 16:58

		20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did. and S222				
S230	50	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did.	US-PGPUB; USPAT	OR	ON	2018/06/02 16:58

S231	23	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did. and orient$8 and (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/02 17:04
S232	50	(US-20110312349-$ or US-20120258773-$ or US-20130265284-$ or US-20090209293-$ or US-20140078086-$ or US-20100159998-$ or US-20130300687-$ or US-20020021278-$ or US-20140004907-$ or US-8810524-$ or US-20070150826-$ or US-20110163986-$ or US-20100188353-$ or US-20070075965-$ or US-20020173345-$ or US-20070004451-$ or US-20090167696-$ or US-20020191029-$ or US-20100277439-$ or US-20100099456-$ or US-20090237374-$ or US-20100090564-$ or US-20050219228-$ or US-20100069115-$ or US-7310540-$ or US-20040127198-$ or US-20010041598-	US-PGPUB; USPAT	OR	ON	2018/06/04 09:17

		$ or US-20030234768-$ or US-20090197615-$ or US-6771768-$ or US-20040263484-$ or US-20090117888-$ or US-20100081473-$ or US-7123243-$ or US-20080188273-$ or US-6434371-$ or US-8000736-$ or US-7239900-$ or US-20090275307-$ or US-20060116175-$ or US-20100331054-$ or US-8295879-$ or US-20070083911-$ or US-8265717-$ or US-20080295015-$ or US-20100164904-$ or US-20100177049-$ or US-8099124-$ or US-8243424-$ or US-5224151-$).did.				
S233	6	S232 and orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/04 09:17
S234	4	"9411446" and orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/05 09:10
S235	2	"20150126246" and orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/05 09:10
S236	3	"20110312349"	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:35
S237	0	"2014244013"	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:37
S238	3	"20140244013"	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:37
S239	0	"14500465".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:38
S240	12	"500465".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:38
S241	2	"20110312349" and orient$9	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:45
S242	0	"20110312349" and orient$9 same swipe	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:46
S243	0	"20110312349" and orient$9 same swip$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:46

S244	2	"20110312349" and orient$9 same (up down)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:46
S245	2	"20110312349" and orient$9 same touch$9	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:46
S246	2	"20110312349" and swip$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:47
S247	2	"20110312349" and swip$6 same volume	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:50
S248	2	"20110312349" and (portrait landscape horizontal$6 vertical$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 09:54
S249	2	"20110312349" and orient$6 with (sens$6 determin$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 10:02
S250	2	"20150126246" and orient$6 with (sens$6 determin$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 10:02
S251	2	"20150126246" and orient$6 with (sens$6 determin$6 volume)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 10:04
S252	2	"20150126246" and swip$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 10:04
S253	23	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or	US-PGPUB; USPAT	OR	ON	2018/06/05 10:06

		US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did. and orient$8 and (volume gain)				
S254	8	S253 and orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/05 10:06
S255	50	(US-20080077261-$ or US-20080152165-$ or US-20160057555-$ or US-20110002487-$ or US-20150181337-$ or US-20130022221-$ or US-9329831-$ or US-20130279706-$ or US-20140086415-$ or US-9030407-$ or US-20110312349-$ or US-20080214160-$ or US-9292045-$ or US-20060123080-$ or US-9008725-$ or US-8811630-$ or US-20130129122-$ or US-20080045140-$ or US-20130287228-$ or US-20020072816-$ or US-20110316768-$ or US-20110150247-$ or US-20130163794-$ or US-20010011993-$ or US-20080174570-$ or US-20090174679-$ or US-6201554-$ or US-7656393-$ or US-20030210286-$ or US-20110267294-$ or US-20090219255-$ or US-20080165132-$ or US-8368658-$ or US-20030073411-$ or US-20100099456-$ or US-7424385-$ or US-8295879-$ or US-20100103098-$ or US-20070026869-$ or US-20060197750-$ or US-20100033424-$ or US-20100321289-$ or US-20100079395-$ or US-7791594-$ or US-20110179386-$ or US-20080014989-$ or US-20070259717-$ or US-20120069231-$ or US-20140118256-$ or US-20040263484-$).did.	US-PGPUB; USPAT	OR	ON	2018/06/05 10:07
S256	8	S255 and orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/05 10:07
S257	172	swip$9 same orient$8 same (volume gain)	US-PGPUB; USPAT	OR	ON	2018/06/05 10:10

S258	0	swip$9 same orient$8 same (volume gain) and 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2018/06/05 10:10
S259	0	swip$9 same orient$8 same (volume gain) and "381".clas.	US-PGPUB; USPAT	OR	ON	2018/06/05 10:10
S260	5	swip$9 same orient$8 same (volume gain) and "715".clas.	US-PGPUB; USPAT	OR	ON	2018/06/05 10:10
S261	109	swip$9 same orient$8 same (volume gain) and @ad<="20140929"	US-PGPUB; USPAT	OR	ON	2018/06/05 10:12
S262	2	"20110312349" and landscap$6 with portrait	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 11:18
S263	0	"20110312349" and paus$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 11:19
S264	2	"20150126246" and paus$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 11:19
S265	60	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20060124080" | "20070142944" | "20080045140" | "20080077261" | "20080152165" | "20080214160" | "20110002487" | "20110312349" | "20130022221" | "20130129122" | "20130202132" | "20130273869" | "20130279706" | "20130287228" | "20140086415" | "20140244013" | "20150181337" | "20160057555" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7840740" | "7853341" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8811630" | "8942252" | "9008725" | "9030407" | "9292045").PN.	US-PGPUB; USPAT	OR	ON	2018/06/05 11:31
S266	16	(US-20160057555-$ or US-20130129122-$ or US-20130279706-$ or US-20080214160-$ or US-20150181337-$ or US-20140086415-$ or US-20110002487-$ or US-20070087686-$ or US-20090209293-$ or US-20150126246-$ or US-	US-PGPUB; USPAT	OR	ON	2018/06/05 11:37

		20130163794-$ or US-20110179386-$ or US-20150177939-$).did. or (US-8811630-$ or US-8368658-$ or US-9851801-$).did.				
S267	8	S265 and S266	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 11:37
S268	3	"20110312349"	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 12:59
S269	60	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20060124080" | "20070142944" | "20080045140" | "20080077261" | "20080152165" | "20080214160" | "20110002487" | "20110312349" | "20130022221" | "20130129122" | "20130202132" | "20130273869" | "20130279706" | "20130287228" | "20140086415" | "20140244013" | "20150181337" | "20160057555" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7840740" | "7853341" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8811630" | "8942252" | "9008725" | "9030407" | "9292045").PN.	US-PGPUB; USPAT	OR	ON	2018/06/05 12:59
S270	1	"20110312349" and S269	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 12:59
S271	12	"405931".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 13:00
S272	2	"20170134855" and pair$9 same type	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/05 13:16
S273	62	mccord and yamaha	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:40

S274	2	mccord and yamaha and clock$6.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:43
S275	2	mccord and yamaha and $6clock$6.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:43
S276	9	mccord and yamaha and $6frequenc$4.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:44
S277	1	mccord and yamaha.as. and $6frequenc$4.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:45
S278	180	sonos and type near3 pair$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:58
S279	695	sonos and type with pair$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:58
S280	15	kallai.in. and type with pair$6	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 15:59
S281	1	("20150126246" "20110312349").pn. and landscap$6 with portrait	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 16:17
S282	1	("20150126246" "20110312349").pn. and (landscap$6 portrait "180"$2)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 16:17
S283	1,079	(landscap$6 portrait "180"$2)	US-PGPUB; USPAT; DERWENT	SAME	ON	2018/06/06 16:30
S284	0	(landscap$6 portrait "180"$2) and control$6 near3 (volume gain level)	US-PGPUB; USPAT; DERWENT	SAME	ON	2018/06/06 16:30
S285	0	(landscap$6 portrait "180"$2) and (swip$6 control$6 operat$6 paramet$8) near3 (volume gain level)	US-PGPUB; USPAT; DERWENT	SAME	ON	2018/06/06 16:31
S286	389	S283 and (swip$6 control$6 operat$6 paramet$8) near3 (volume gain level)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 16:32
S287	45	S283 and (swip$6 control$6 operat$6 paramet$8) near3 (volume gain level) same orient$8	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 16:32
S288	379,902	(landscap$6 portrait "180"$2) and (swip$6 control$6 operat$6 paramet$8) near3 (volume gain level)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/06/06 16:33

S289	3	"2013055661".did.	US-PGPUB; USPAT; DERWENT	OR	OFF	2019/03/16 10:25
S290	10	"2842003"	US-PGPUB; USPAT; DERWENT	OR	OFF	2019/03/16 10:31
S291	4	("20060123080" | "20160011590" | "20180210433" | "9671780").PN.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:03
S292	46	sonos.as. and orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:23
S360	5	("20110312349" "8811630").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/04/06 12:58
S361	3	("9671780").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/04/06 13:05
S388	809	((("Sonos") near3 ("Inc"))).AS,AANM.	USPAT	OR	ON	2020/04/06 15:37
S467	70	("10028028" | "20010042107" | "20020022453" | "20020026442" | "20020072816" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "20080152312" | "20090076881" | "20090179867" | "20090234476" | "20100017714" | "20100325239" | "20120054278" | "20130243199" | "20130317635" | "20130331970" | "20130339397" | "20140093085" | "20140093096" | "20140122590" | "20140146970" | "20140230015" | "20140310058" | "20150179227" | "20150186110" | "20150237409" | "20150245138" | "20150286360" | "20160180248" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7921369" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8799080" | "8843500" | "8903526" | "8942252" | "9246866" | "9330096" | "9916126").PN.	US-PGPUB; USPAT	OR	ON	2020/10/19 10:49

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S473	3	crutchfield.in. and (S468 S469 S470 S471 S472)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 11:47
S475	792	"7483538"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:05
S476	58	"7483538" NOT SONOS.AS.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:05
S477	54	"7483538" NOT SONOS.AS,aanm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:05
S478	2	"7483538".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:07
S479	0	"7483538".pn..ap. and pair$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:16
S480	6	"670109".ap. and pair$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:17
S481	3	"670109".ap. and pair$4 same2 determin$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:18
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S483	11	("013740" "083499" "299847" "629937" "128443" "670109").ap. and two$6 same stereo	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 14:42
S484	1	sonos.as,aanm. and two$6 same stereo and @pd<="20110408"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:01
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		"7257398"	"7260616"	"7263110"		
		"7269338"	"7277547"	"7286652"		
		"7289631"	"7293060"	"7295548"		
		"7302468"	"7305694"	"7308188"		
		"7310334"	"7312785"	"7313384"		
		"7313593"	"7319764"	"7324857"		
		"7330875"	"7333519"	"7346332"		
		"7356011"	"7359006"	"7366206"		
		"7372846"	"7391791"	"7392102"		
		"7392481"	"7400644"	"7412499"		
		"7424267"	"7428310"	"7430181"		
		"7457948"	"7472058"	"7474677"		
		"7483538"	"7483540"	"7483958"		
		"7490044"	"7492912"	"7505889"		
		"7509181"	"7519188"	"7519667"		
		"7539551"	"7548744"	"7548851"		
		"7558224"	"7558635"	"7561932"		
		"7571014"	"7574274"	"7599685"		
		"7606174"	"7620468"	"7626952"		
		"7627825"	"7630500"	"7630501"		
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		"7657224"	"7657644"	"7657910"		
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		"7669219"	"7672470"	"7675943"		

		| "7676044" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7975051" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476").PN.				
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			"8688431" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" | "8886347" | "8904066" | "8914559" | "8917877" | "8923997" | "8930006" | "8934647" | "8934655" | "8942252" | "8942395" | "8954177" | "8965544" | "8965546" | "8966394" | "8977974" | "8984442" | "9020153" | "9042556" | "9112622" | "9137602" | "9160965" | "9195258" | "9219959" | "9226073" | "9245514" | "9325286" | "9524098" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023" | "D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271" | "D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246" | "D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" | "D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "RE41608").PN.			

S493	1,018	(two$9 $6channel stereo) and (S488 S489 S490 S491 S492)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:06
S494	493	(two$9 $6channel stereo) same determin$6 and (S488 S489 S490 S491 S492)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:22
S495	21	(two$9 $6channel stereo) same determin$6 and (S488 S489 S490 S491 S492) and sonos.as,aanm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:22
S496	295	(two$9 $6channel stereo) same determin$6 and (S488 S489 S490 S491 S492) and (sync synchron$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:28
S497	0	(two$9 $6channel stereo) same determin$6 and ("7483538" "20030215097").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:31
S498	3	(two$9 $6channel stereo) and ("7483538" "20030215097").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:32
S499	2	(two$9 $6channel same stereo) and ("7483538" "20030215097").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:33
S500	242	(two$9 $6channel same3 stereo) same determin$6 and (S488 S489 S490 S491 S492) and (sync synchron$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/19 15:33
S501	5	"297991".ap. and simulat$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/20 14:00
S502	3	"20050195999"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/20 14:05
S503	495	2002/0072816 2008/0045140 2006/0149402	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/20 15:07
S504	0	(2002/0072816 2008/0045140 2006/0149402).pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/20 15:08
S505	6	("20020072816" "20080045140" "20060149402").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/10/20 15:08
S506	222	("20060287746" | "7076204" | "7716375" | "20010055950" | "20020146981" | "20020174243" | "20030002849" | "20030050058" | "20030056220" | "20030103464" | "20030220705" | "20030225834" | "20040176025" | "20040195313" |	US-PGPUB; USPAT	OR	ON	2020/10/21 10:33

		"20040203376" | "20040214524" | "20050100166" | "20050129240" | "20050149204" | "20060265571" | "20080273714" | "20090087000" | "20110222701" | "4661902" | "4689786" | "5852744" | "5910990" | "5960167" | "6026297" | "6131130" | "6336219" | "6349352" | "6732176" | "6772267" | "6788938" | "6950666" | "6965948" | "6970481" | "6981259" | "6993570" | "7107442" | "7123731" | "7158783" | "7174157" | "7184774" | "7246374" | "7275156" | "7308489" | "7363363" | "7376834" | "7392387" | "7400732" | "7454619" | "7532862" | "7561697" | "7581096" | "7634093" | "7657255" | "7752329" | "7757076" | "7899656" | "7904720" | "7907736" | "7916861" | "7937089" | "7937752" | "8156337" | "8250218" | "8509463" | "8515389" | "8768252" | "8797926" | "9014833" | "9078281" | "9560448" | "9998321" | "20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206" | "20010020193" | "20020015003" | "20040264717" | "20050195999" | "20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7620468" | "7975051" | "8270631" | "8601394" | "8688431" | "9112622" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" |			

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		"20040059842" | "20040059965" | "20040066736" | "20040071299" | "20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "20040114771" | "20040117044" | "20040117462" | "20040128701" | "20040131192" | "20040133689" | "20040143368" | "20040143852" | "20040147224" | "20040148237" | "20040168081" | "20040170383" | "20040171346" | "20040177167" | "20040179554" | "20040183827" | "20040185773" | "20040203354" | "20040203378" | "20040203590" | "20040208158" | "20040213230" | "20040220687" | "20040223622" | "20040224638" | "20040225389" | "20040228367" | "20040248601" | "20040249490" | "20040249965" | "20040249982" | "20040252400" | "20040253969" | "20050002535" | "20050010691" | "20050011388" | "20050013394" | "20050015551" | "20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050144284" | "20050147261" | "20050154766" | "20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060045281" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" | "20060193454" | "20060193482" | "20060199538" | "20060205349" |			

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S508	224	("20090070434" | "20090089327" | "20090097672" | "20090100189" | "20090124289" | "20090157905" | "20090164655" | "20090169030" | "20090180632" | "20090193345" | "20090222115" | "20090228919" | "20090232326" | "20090251604" | "20100004983" | "20100010651" | "20100031366" | "20100049835" | "20100052843" | "20100067716" | "20100087089" | "20100142735" | "20100153097" | "20100228740" | "20100272270" | "20100284389" | "20100290643" | "20100299639" | "20110001632" | "20110002487" | "20110044476" | "20110066943" |	US-PGPUB; USPAT	OR	ON	2020/10/21 10:33

		"20110110533" | "20110170710" | "20110228944" | "20110299696" | "20110316768" | "20120029671" | "20120030366" | "20120047435" | "20120051558" | "20120051567" | "20120060046" | "20120127831" | "20120129446" | "20120148075" | "20120185771" | "20120192071" | "20120207290" | "20120237054" | "20120263325" | "20120281058" | "20120290621" | "20130010970" | "20130018960" | "20130028443" | "20130031475" | "20130038726" | "20130041954" | "20130047084" | "20130051572" | "20130052940" | "20130070093" | "20130080599" | "20130094670" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "20130236029" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140037097" | "20140064501" | "20140075308" | "20140075311" | "20140079242" | "20140108929" | "20140112481" | "20140123005" | "20140140530" | "20140161265" | "20140181569" | "20140219456" | "20140226823" | "20140242913" | "20140256260" | "20140267148" | "20140270202" | "20140273859" | "20140279889" | "20140285313" | "20140286496" | "20140294200" | "20140298174" | "20140323036" | "20140344689" | "20140355768" | "20140355794" | "20140378056" | "20150019670" | "20150026613" | "20150032844" | "20150043736" | "20150049248" | "20150063610" | "20150074527" | "20150074528" | "20150098576" | "20150139210" | "20150146886" | "20150201274" | "20150256954" | "20150281866" | "20150286360" | "20150304288" |			

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		"6687664"	"6704421"	"6741961"		
		"6757517"	"6763274"	"6778073"		
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		"6809635"	"6816510"	"6816818"		
		"6823225"	"6826283"	"6836788"		
		"6839752"	"6859460"	"6859538"		
		"6873862"	"6882335"	"6889207"		
		"6898642"	"6901439"	"6907458"		
		"6912610"	"6915347"	"6916980"		
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		"6931134"	"6931557"	"6934766"		
		"6937988"	"6970482"	"6985694"		
		"6987767"	"6987947"	"7007106"		
		"7020791"	"7043477"	"7043651"		
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		"20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "20130236029" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140037097" | "20140064501" | "20140075308" | "20140075311" | "20140079242" | "20140108929" | "20140112481" | "20140123005" | "20140140530" | "20140161265" | "20140181569" | "20140219456" | "20140226823" | "20140242913" | "20140256260" | "20140267148" | "20140270202" | "20140273859" | "20140279889" | "20140285313" | "20140286496" | "20140294200" | "20140298174" | "20140323036" | "20140344689" | "20140355768" | "20140355794" | "20140378056" | "20150019670" | "20150026613" | "20150032844" | "20150043736" | "20150049248" | "20150063610" | "20150074527" | "20150074528" | "20150098576" | "20150139210" | "20150146886" | "20150201274" | "20150256954" | "20150281866" | "20150286360" | "20150304288" | "20150365987" | "20170188152" | "3956591" | "4105974" | "4296278" | "4306114" | "4382158" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4816989" | "4824059" | "4845751" | "4994908" | "4995778" | "5086385" | "5151922" | "5153579" | "5182552" | "5185680" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5519641" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5640388" | "5652749" | "5661665" | "5668884" |			

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"7058889"	"7068596"	"7072477"
"7092528"	"7092694"	"7096169"
"7113999"	"7115017"	"7120168"
"7130316"	"7130368"	"7130608"
"7130616"	"7136934"	"7139981"
"7143141"	"7143939"	"7146260"
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"7197148"	"7206367"	"7206618"
"7206967"	"7209795"	"7218708"
"7236739"	"7236773"	"7257398"
"7260616"	"7263110"	"7277547"
"7286652"	"7289631"	"7293060"
"7295548"	"7302468"	"7305694"
"7308188"	"7310334"	"7312785"
"7313593"	"7319764"	"7324857"
"7330875"	"7333519"	"7346332"
"7356011"	"7359006"	"7366206"
"7372846"	"7391791"	"7392102"
"7392481"	"7400644"	"7412499"
"7424267"	"7428310"	"7430181"
"7457948"	"7472058"	"7474677"
"7483538"	"7483540"	"7483958"
"7490044"	"7492912"	"7505889"
"7509181"	"7519188"	"7519667"
"7539551"	"7548744"	"7548851"
"7558224"	"7558635"	"7561932"
"7571014"	"7574274"	"7599685"
"7606174"	"7626952"	"7627825"
"7630500"	"7630501"	"7631119"
"7643894"	"7653344"	"7657224"
"7657644"	"7657910"	"7665115"
"7668990"	"7669113"	"7669219"
"7672470"	"7675943"	"7676044"
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"7710941"	"7711774"	"7720096"
"7721032"	"7742740"	"7742832"
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"7765315"	"7792311"	"7793206"
"7804972"	"7805210"	"7817960"
"7827259"	"7831054"	"7835689"
"7849181"	"7853341"	"7865137"
"7882234"	"7885622"	"7907819"
"7916877"	"7917082"	"7933418"
"7934239"	"7945636"	"7945708"
"7958441"	"7962482"	"7966388"
"7987294"	"7995732"	"7996566"
"7996588"	"8014423"	"8015306"
"8020023"	"8023663"	"8028038"
"8028323"	"8041062"	"8045721"
"8045952"	"8050203"	"8050652"
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		| "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" | "D364878" | "D365102" | "D366044" | "D372716" | "D377651" | "D379816" | "D380752" | "D382271" | "D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246" | "D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" | "D476643" | "D477310" | "D478051" | "D478069" | "D478896" | "D479520" | "D481056" | "D486145" | "D491925" | "D493148" | "D495333" | "D496003" | "D496005" | "D496335" | "D497363" | "D499086" | "D499395" | "D499718" | "D500015" | "D501477" | "D504872" | "D504885" | "D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "RE41608").PN.				
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		"7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7921369" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8799080" | "8843500" | "8903526" | "8942252" | "9246866" | "9330096" | "9916126").PN.				
S519	1,182	S512 S513 S514 S515 S516 S517 S518	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 11:21
S520	2	S519 and farinelli.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 11:21
S521	1	S519 and matheny.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 11:24
S522	275	sonos.as,aanm. and @ad<="20100408"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:54
S523	8	sonos.as,aanm. and @ad<="20100408" and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:55
S524	11	sonos.as,aanm. and @ad<="20100408" and ("381" "704").clas.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:55
S525	3	sonos.as,aanm. and @pd<="20100408" and ((700/94.ccls.) ("381" "704").clas.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:56
S526	231	sonos.as,aanm. and @pd<="20100408"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:58
S527	29	sonos.as,aanm. and @pd<="20100408" and pair$56	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:59
S528	29	sonos.as,aanm. and @pd<="20100408" and pair$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 13:59

S529	15	sonos.as,aanm. and @pd<="20100408" and (sync synchron$9)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:01
S531	18	sonos.as,aanm. and @pd<="20100408" and group$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:06
S532	1	sonos.as,aanm. and @pd<="20100408" and stereo	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:34
S533	0	sonos.as,aanm. and @pd<="20100408" and stereo and channel	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:34
S534	468	sonos.as,aanm. and array	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:40
S535	283	sonos.as,aanm. and array and @pd<="20190828"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:40
S536	234	sonos.as,aanm. and array and @pd<="20190828" and (sum difference mix$5 $5minus minus)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:41
S537	40	sonos.as,aanm. and array and @pd<="20190828" and (sum difference mix$5 $5minus minus) and transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:42
S538	16	sonos.as,aanm. and array and @pd<="20181004" and (sum difference mix$5 $5minus minus) and transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:43
S539	16	sonos.as,aanm. and array and @pd<="20181004" and transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:44
S541	764	"8483853"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:50
S542	2	"8483853".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:50

S543	0	"297991".ap. and bonded	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:53
S544	14	"297991".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:53
S545	5	"297991".ap. and simulat$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:55
S546	12	("288812" "806070" "013740" "853790" "297991").ap. and simulat$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:56
S547	0	("853790").ap. and simulat$5	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:58
S548	4	"853790".ap. and zone	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 14:59
S549	24	sonos.as,aanm. and @pd<="20181004" and transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/21 16:04
S550	16	sonos.as,aanm. and @pd<="20181004" and array and transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:36
S551	7	sonos.as,aanm. and @pd<="20181004" and array same transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:38
S552	56	sum same difference same array same transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:39
S553	1,395	sum same difference same transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:40
S554	556	sum near5 difference same transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:41

S555	56	sum same difference same array same transfer near3 function	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:41
S556	51	sum same difference same transfer near3 function and (speaker loudspeaker transducer) near3 array	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:43
S557	11	S555 and S556	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:45
S558	61	sum same difference same transfer near3 function and (speaker loudspeaker transducer) near6 (calibrat$6 array)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:47
S559	10	"5870484" and sum same difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 10:50
S560	1	"5870484" and sum same difference same6 transfer	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:12
S561	38	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7391791" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "8942252").PN.	US-PGPUB; USPAT	OR	ON	2020/10/22 11:13
S562	1	S561 and sum same difference same6 transfer	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:13
S563	3	S561 and sum same difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:13
S564	2	S561 and transfer adj function	US-PGPUB; USPAT;	OR	ON	2020/10/22 11:14

			EPO; JPO; DERWENT			
S565	5	S563 S564	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:14
S566	0	sonos.as,aanm. and @pd<="20181004" and transfer near3 function and sum same difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:20
S567	67	sonos.as,aanm. and @pd<="20181004" and sum same difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:20
S568	0	sonos.as,aanm. and @pd<="20181004" and sum near8 difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:20
S569	0	sonos.as,aanm. and @pd<="20181004" and sum with difference	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:20
S570	13	sonos.as,aanm. and @pd<="20181004" and transfer near3 function same (speaker driver)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:22
S571	4	sonos.as,aanm. and @pd<="20181004" and transfer near3 function same (speaker driver) and ($5lobe beam$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2020/10/22 11:23

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S95	1	"Term Removed" and playback adj device	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:12
S96	1	"Term Removed" and motion	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:13
S97	6,971	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2016/09/02 09:13
S98	51,742	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2016/09/02 09:14

S99	265	S97 and S98	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:14
S100	234	S99 and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:16
S101	2,103	(speaker loudspeaker transducer play$5) same orientation.ab.	US-PGPUB; USPAT	OR	ON	2016/09/02 09:18
S102	4,243	(speaker loudspeaker transducer play$5) same orientation.clm.	US-PGPUB; USPAT	OR	ON	2016/09/02 09:18
S103	957	S101 and S102	US-PGPUB; USPAT	OR	ON	2016/09/02 09:18
S104	27	S100 and S103	US-PGPUB; USPAT	OR	ON	2016/09/02 09:18
S105	50	S100 and (S101 S102)	US-PGPUB; USPAT	OR	ON	2016/09/02 09:19
S106	5,573	S100 S101 S102	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:19
S107	3,759	S106 and (stationary stationery motion moving)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:19
S108	4,134	S106 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:20
S109	679	S103 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:20
S110	41	S105 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:20
S111	44	S105 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:25
S112	50	(S99 and (S101 S102)) and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:25
S113	55	(S99 and (S101 S102))	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:26

S114	43	S113 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:26
S115	2	"20130129122"	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:28
S116	4	("6766028" | "20130279706" | "20130279706" | "20130129122" | "20080214160").PN.	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:30
S117	4	S116 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:31
S118	766	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).clm. and sonos	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:33
S119	18	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).clm. and sonos.AS.	US-PGPUB; USPAT	OR	OFF	2016/09/02 09:33
S121	18	("5136650" | "5208421" | "5212733" | "5402501" | "5524054" | "5666424" | "5689570" | "5792971" | "5796844" | "5818941" | "5850455" | "6009182" | "6490359" | "6798889" | "6826282").PN. OR ("7158844").URPN.	US-PGPUB; USPAT	OR	OFF	2016/09/02 12:18
S122	122	playback same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT	OR	ON	2016/09/02 12:18
S123	7,422,350	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/02 12:18
S124	51,742	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2016/09/02 12:19
S125	122	playback same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT	OR	ON	2016/09/02 12:20
S126	1,028	(speaker loudspeaker transducer play$5) same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT	OR	ON	2016/09/02 12:20
S127	1,001	(speaker loudspeaker transducer play$5) same orientation and (sync synchron$9) same group$4 and S123	US-PGPUB; USPAT	OR	ON	2016/09/02 12:20

S128	407	(speaker loudspeaker transducer play$5) same orientation and (sync synchron$9) same group$4 and S123.clm.	US-PGPUB; USPAT	OR	ON	2016/09/02 12:20
S129	198	(speaker loudspeaker transducer play$5) same orientation and (sync synchron$9) same group$4 and S123.ab.	US-PGPUB; USPAT	OR	ON	2016/09/02 12:20
S133	4	("6766028" | "20130279706" | "20130279706" | "20130129122" | "20080214160").PN.	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:00
S134	4	S133 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:00
S135	4	S134	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:00
S136	8	"Term Removed" and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:00
S137	8	"Term Removed" and (station$6 stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:01
S138	2	("20110312349" "8811630").pn. and (station$6 stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:02
S139	8	"Term Removed" and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent mobile)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:26
S140	2	("20110312349" "8811630").pn. and (station$6 stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent mobile)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:29
S141	1	("20110312349" "8811630").pn. and (held)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:29
S142	2	("20110312349" "8811630").pn. and (held hold$6 dock$4)	US-PGPUB; USPAT	OR	OFF	2016/09/16 13:29

S143	1	"20110002487" and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:15
S144	0	"20160057555" and disabl$6	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:17
S145	0	"20130129122" and disabl$6	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:17
S146	1	"20130279706" and disabl$6	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:18
S147	0	"20160057555" and inactiv$6	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:18
S148	1	"20160057555" and (activ$6 motion)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:18
S149	1	"20160057555" and ($3activ$6 motion)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:19
S150	2	S138 and ($3activ$6 motion)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:20
S151	2	S138 and ($3activ$6 disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:20
S152	9	"500465" and (while disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:22
S153	26	"500465" and (while during)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:22
S154	9	"Term Removed" and (while during)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:22
S155	1	"Term Removed" and (motion with disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:22
S156	9	"Term Removed" and (while during)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:23
S157	1	S138 and ($3activ$6 disabl$6) same (motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:24

S158	2	("20110312349") and ($3activ$6 disabl$6) same (motion moving moved)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:25
S159	2	("20110312349") and ($3activ$6 disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:25
S160	2	("20110312349") and (deactiv$6 disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:28
S161	0	("8811630" "20160057555").pn. and (deactiv$6 disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:29
S162	2	("8811630" "20160057555").pn. and ($4activ$6 disabl$6)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:29
S163	1,257,701	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent) same ($4activ$6 disabl$4)	US-PGPUB; USPAT	OR	OFF	2016/09/16 14:30
S166	0	("2016/0057555").URPN.	USPAT	OR	OFF	2016/09/17 09:27
S167	1	("6766028" | "20130279706" | "20130279706" | "20130129122" | "20080214160").PN.	USPAT	OR	OFF	2016/09/17 09:27
S168	4	("6766028" | "20130279706" | "20130279706" | "20130129122" | "20080214160").PN.	US-PGPUB; USPAT	OR	OFF	2016/09/17 09:28
S169	4	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent) and S168	US-PGPUB; USPAT	OR	OFF	2016/09/17 09:29
S170	0	"2008104843"	US-PGPUB; USPAT	OR	OFF	2016/09/17 09:31
S176	54,283	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2017/02/14 11:26
S177	7,623	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/02/14 11:26
S178	54,283	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2017/02/14 11:26
S179	324	S177 and S178	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:26

S180	289	S179 and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:26
S181	2,172	(speaker loudspeaker transducer play$5) same orientation.ab.	US-PGPUB; USPAT	OR	ON	2017/02/14 11:42
S182	4,397	(speaker loudspeaker transducer play$5) same orientation.clm.	US-PGPUB; USPAT	OR	ON	2017/02/14 11:42
S183	990	S181 and S182	US-PGPUB; USPAT	OR	ON	2017/02/14 11:42
S184	289	S179 and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:42
S185	61	S184 and (S181 S182)	US-PGPUB; USPAT	OR	ON	2017/02/14 11:42
S186	48	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20050201549" | "20070003067" | "20070142944" | "20070265031" | "20080144864" | "20080146289" | "20110002487" | "20120051567" | "20130022221" | "20130129122" | "4696037" | "5553147" | "5923902" | "6256554" | "6404811" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "6809635" | "6882335" | "7130608" | "7130616" | "7143939" | "7236773" | "7571014" | "7643894" | "7657910" | "7724892" | "7742740" | "7889871" | "8014423" | "8045952" | "8234395" | "8423659" | "8689036" | "8775546").PN. OR ("8995240").URPN.	US-PGPUB; USPAT	OR	ON	2017/02/14 11:45
S187	4	"20140314239" "20140086415"	US-PGPUB; USPAT	OR	ON	2017/02/14 11:46
S188	5,807	S184 S181 S182	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:57
S189	4,308	S188 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:57
S190	990	S181 and S182	US-PGPUB; USPAT	OR	ON	2017/02/14 11:57

S191	697	S190 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:57
S192	61	S184 and (S181 S182)	US-PGPUB; USPAT	OR	ON	2017/02/14 11:58
S193	52	S192 and (stationary stationery motion moving moved)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:58
S194	21	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).clm. and sonos.AS.	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:58
S195	61	(S179 and (S181 S182)) and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2017/02/14 11:58
S196	55	S192 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2017/02/14 12:00
S293	551,771	(speaker loudspeaker transducer play$5) same (orientat$5 position$6)	US-PGPUB; USPAT	OR	ON	2019/03/16 10:09
S294	356,912	S293 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right)	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:10
S295	114,168	(speaker loudspeaker transducer play$5) same (orientat$5 position$6) and (orientat$5 position$6) near3 sens$4	US-PGPUB; USPAT	OR	ON	2019/03/16 10:11
S296	108,687	S295 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:11
S297	81,117	S296 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right)	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:11
S298	16	"Term Removed"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:13
S299	5	"Term Removed" and capacit$6	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:13
S300	32,154	S296 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right) and (switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen)	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:15

S301	2	S296 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right) and (switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and "20130022221"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:18
S302	0	S296 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right) and (switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and "20130174204"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:21
S303	2	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and "20130174204"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:22
S304	2	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and "20130094667"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:22
S305	14	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and "2013055661"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:24
S306	0	"Term Removed"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:25
S307	1	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) and ("8407623" "8423893").pn.	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:26
S308	2	("8407623" "8423893").pn.	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:30
S309	1	("8407623" "8423893").pn. and orient$6	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:30
S310	20,881	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:32
S311	3,155	S300 and S310	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:32
S312	6	"Term Removed"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:32
S313	1	"20170269579"	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:34

S314	1,374,536	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8 (g05B g06f).cpcl. (700/94.ccls. "81".clas. "381".clas.)	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:35
S315	8,164	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8 and ((g05B g06f).cpcl. (700/94.ccls. "81".clas. "381".clas.))	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:35
S316	3,155	S300 and S310 and S314	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:36
S317	1,822	S300 and S310 and S315	US-PGPUB; USPAT	OR	OFF	2019/03/16 10:36
S318	5,275	(speaker loudspeaker transducer play$5) same orientation.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 10:58
S319	58	S317 and S318	US-PGPUB; USPAT	OR	ON	2019/03/16 10:58
S320	2	"20110312349"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:01
S321	15	("2015/0205400").URPN.	USPAT	OR	ON	2019/03/16 11:03
S322	33	S317 and S318 and capacit$9	US-PGPUB; USPAT	OR	ON	2019/03/16 11:05
S323	28	S317 and S318 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:06
S324	693,141	"Term Removed"and" (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:06
S325	43	"Term Removed" and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:06
S326	50	"Term Removed"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:06
S327	43	S326 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:07

S328	10	S327 and orientation.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:07
S329	10	S327 and orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:07
S330	10,189	(speaker loudspeaker transducer play$5) same orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:07
S331	71	S317 and S330	US-PGPUB; USPAT	OR	ON	2019/03/16 11:07
S332	40	S331 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:08
S333	40	S331 and (touch$8 capacit$9).clm. not S327	US-PGPUB; USPAT	OR	ON	2019/03/16 11:08
S334	12	S331 and (touch$8 capacit$9).clm. not S323	US-PGPUB; USPAT	OR	ON	2019/03/16 11:08
S335	137,025	((g05B g06f).cpcl. (700/94.ccls. "81".clas. "381".clas.)) and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:09
S336	6,952	S335 and orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:09
S337	1,039	S297 and S336	US-PGPUB; USPAT	OR	ON	2019/03/16 11:10
S338	303	(speaker loudspeaker transducer play$5).clm. and S337	US-PGPUB; USPAT	OR	ON	2019/03/16 11:11
S339	6,952	S336 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:22
S340	1,039	S336 and (touch$8 capacit$9).clm. and S297	US-PGPUB; USPAT	OR	ON	2019/03/16 11:22
S341	1,141	S336 and (touch$8 capacit$9).clm. and S296	US-PGPUB; USPAT	OR	ON	2019/03/16 11:22
S342	46	sonos.as. and orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:23

S343	0	sonos.as. and orient$8.clm. and @pd<="20130929"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:23
S344	6	sonos.as. and orient$8 and @pd<="20130929"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:23
S345	1	"20170269579"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:24
S346	1	S345 AND ((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/03/16 11:24
S347	10,557	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/03/16 11:24
S348	984	S347 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:25
S349	65	S348 and orient$8.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:25
S350	33	S348 and orient$8.clm. and @ad<="20140929"	US-PGPUB; USPAT	OR	ON	2019/03/16 11:26
S351	69	("2009/0273577").URPN.	USPAT	OR	ON	2019/03/16 11:52
S352	54	S351 and (touch$8 capacit$9).clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:52
S353	9	S351 and (touch$8 capacit$9).clm. and orient$9.clm.	US-PGPUB; USPAT	OR	ON	2019/03/16 11:52
S354	5,382	g06f3/165.cpc.	US-PGPUB; USPAT	OR	ON	2019/03/16 12:25
S355	33	sonos.as. and mccord near2 paul	US-PGPUB; USPAT	OR	ON	2019/03/16 12:41
S356	110	g06f17/30.cpc.	US-PGPUB; USPAT	OR	ON	2019/03/16 12:48
S357	4,877	g06f16/10.cpc.	US-PGPUB; USPAT	OR	ON	2019/03/16 13:05

S358	1,189,927	g06f.cpcl.	US-PGPUB; USPAT	OR	ON	2019/03/16 13:05
S359	1,189,927	g06f.cpcl.	US-PGPUB; USPAT	OR	ON	2019/03/18 08:54
S363	602,521	(speaker loudspeaker transducer play$5) same (orientat$5 position$6)	US-PGPUB; USPAT	OR	ON	2020/04/06 13:07
S364	602,521	S363	US-PGPUB; USPAT	OR	ON	2020/04/06 13:07
S365	391,243	S363 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right)	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:08
S366	391,243	S365	US-PGPUB; USPAT	OR	ON	2020/04/06 13:08
S367	129,531	(speaker loudspeaker transducer play$5) same (orientat$5 position$6) and (orientat$5 position$6) near3 sens$4	US-PGPUB; USPAT	OR	ON	2020/04/06 13:10
S368	129,531	S367	US-PGPUB; USPAT	OR	ON	2020/04/06 13:10
S369	123,518	S367 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:11
S370	123,518	S369	US-PGPUB; USPAT	OR	ON	2020/04/06 13:11
S371	92,701	S369 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right)	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:12
S372	92,701	S371	US-PGPUB; USPAT	OR	ON	2020/04/06 13:12
S373	37,790	S369 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right) and (switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen)	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:13
S374	37,790	S373	US-PGPUB; USPAT	OR	ON	2020/04/06 13:13

S375	23,836	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:14
S376	23,836	S375	US-PGPUB; USPAT	OR	ON	2020/04/06 13:14
S377	3,793	S373 and S375	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:16
S378	3,793	S377	US-PGPUB; USPAT	OR	ON	2020/04/06 13:16
S379	1,513,906	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8 (g05B g06f).cpcl. (700/94.ccls. "81".clas. "381".clas.)	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:16
S380	3,793	S373 and S375 and S379	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:16
S381	3,793	S380	US-PGPUB; USPAT	OR	ON	2020/04/06 13:16
S382	23,836	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:21
S383	15	"Term Removed"	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:22
S384	230,261	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen).clm.	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:26
S385	251,385	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen).ab,clm.	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:26
S386	721,370	orient$8.ab,clm.	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:26
S387	7,446	S385 and S386	US-PGPUB; USPAT	OR	OFF	2020/04/06 13:30
S389	521	wachter and sonos.as.	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:21
S390	0	sonos.as. and mccord.xa.	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:23

S391	44	sonos.as. and mccord.xp.	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:24
S392	5	("20020003548" | "20050289244" | "20070142022" | "7218708" | "7668990").PN.	US-PGPUB; USPAT	OR	ON	2020/04/06 15:27
S393	2	"20150286360"	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:29
S394	1,544	sonos.as,aanm. and @ad<="20190406"	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:38
S395	131	sonos.as,aanm. and @ad>="20190406"	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:38
S396	382	sonos.as,aanm. and @ad>="20180406"	US-PGPUB; USPAT	OR	OFF	2020/04/06 15:38
S397	6	"9671780"	US-PGPUB; USPAT	OR	OFF	2020/04/06 16:03
S398	11,441	(speaker loudspeaker transducer play$5) same orient$8.clm.	US-PGPUB; USPAT	OR	ON	2020/10/15 15:39
S399	80,382	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2020/10/16 11:52
S400	80,382	S399	US-PGPUB; USPAT	OR	ON	2020/10/16 11:52
S401	6,615,465	(portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2020/10/16 11:53
S402	80,382	S399 and S400	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:05
S403	7,478	(speaker loudspeaker transducer play$5) same orientation.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:05
S404	707,591	(portrait and landscape horizontal and vertical up and down left and right).ab,clm.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:06
S405	1,354	S403 and S404	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:09

S406	45,478	(speaker loudspeaker transducer) same orientation	US-PGPUB; USPAT	OR	ON	2020/10/16 12:09
S407	8,979	(speaker loudspeaker transducer) same orient$7.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:10
S408	4,654	(speaker loudspeaker transducer) same orient$7.ab,clm. and S403	US-PGPUB; USPAT	OR	ON	2020/10/16 12:10
S409	1,133	(speaker loudspeaker transducer) same orient$7.ab,clm. and S404	US-PGPUB; USPAT	OR	ON	2020/10/16 12:10
S410	84	(stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).clm. and sonos.AS.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:11
S411	84	S410	US-PGPUB; USPAT	OR	ON	2020/10/16 12:11
S412	93	((stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).ab,clm. S409) and sonos.AS.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:11
S413	130	((stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).ab,clm. S403) and sonos.AS.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:18
S414	532	playback same orientation and (sync synchron$9) same group$4	US-PGPUB; USPAT	OR	ON	2020/10/16 12:23
S415	532	S414	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:23
S416	21,219	((stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent).ab,clm. S403) and (sync synchron$9) same group$4	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:24
S417	15	"Term Removed"	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:28
S418	1	"Term Removed" and play$5.ti.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:28

S419	0	"Term Removed" and griffith.in.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:28
S420	5	"Term Removed" and griffiths.in.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:28
S421	13,368	((G05B19/42 OR G05B2219/23249 OR G06F3/165).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2020/10/16 12:34
S422	80,382	(speaker loudspeaker transducer play$5) same orientation	US-PGPUB; USPAT	OR	ON	2020/10/16 12:34
S423	1,087	S421 and S422	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:34
S424	992	S423 and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:34
S425	992	S424	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:34
S426	518	(G05B19/42 OR G05B2219/23249)".cpc" and G06F3/162.CPC.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:38
S427	17,179	((G06F3/16 G06F3/162 G06F3/165).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2020/10/16 12:43
S428	70,783	((G06F3/16 G06F3/162 G06F3/165).CPC. OR (700/94).CCLS. "381".clas.)	US-PGPUB; USPAT	OR	ON	2020/10/16 12:43
S429	4,434	S422 and S428	US-PGPUB; USPAT	OR	ON	2020/10/16 12:43
S430	7,478	(speaker loudspeaker transducer play$5) same orientation.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:44
S431	792	S430 and S428	US-PGPUB; USPAT	OR	ON	2020/10/16 12:44
S432	0	G06F3/162.cpc and ((G06F3/16 G06F3/165).CPC. OR (700/94).CCLS. "381".clas.)	US-PGPUB; USPAT	OR	ON	2020/10/16 12:44
S433	70,077	((G06F3/16 G06F3/165).CPC. OR (700/94).CCLS. "381".clas.)	US-PGPUB; USPAT	OR	ON	2020/10/16 12:45

S434	1,720	G06F3/162.cpc.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:45
S435	1,014	S433 and S434	US-PGPUB; USPAT	OR	ON	2020/10/16 12:45
S436	40	S430 and S434	US-PGPUB; USPAT	OR	ON	2020/10/16 12:45
S437	59,651	S422 and (portrait and landscape horizontal and vertical up and down left and right)	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:45
S438	90	S437 and S434	US-PGPUB; USPAT	OR	ON	2020/10/16 12:46
S439	3,547	S437 and S428	US-PGPUB; USPAT	OR	ON	2020/10/16 12:46
S440	74	S437 and S435	US-PGPUB; USPAT	OR	ON	2020/10/16 12:46
S441	90	S438 S440	US-PGPUB; USPAT	OR	ON	2020/10/16 12:46
S442	2	"Term Removed" and kuper.in.	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:47
S443	36	S430 and S435	US-PGPUB; USPAT	OR	ON	2020/10/16 12:51
S444	1	("2016/0026427").URPN.	USPAT	OR	ON	2020/10/16 12:51
S445	137,561	(speaker loudspeaker transducer play$5) same (orientat$5 position$6) and (orientat$5 position$6) near3 sens$4	US-PGPUB; USPAT	OR	ON	2020/10/16 12:57
S446	131,321	S445 and (stationary stationery motion moving moved static unmoving stable immobil$5 motionless mounted fastened secure settled quiescent)	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:57
S447	40,681	S446 and (portrait and landscape horizontal$5 and vertical$5 up and down left and right) and (switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen)	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:57
S448	25,309	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:57

S449	10,202	(switch$6 button control$6 interface near2 element) with (capacit$6 touch$6 touch$3screen) same orient$8 and ((g05B g06f).cpcl. (700/94.ccls. "81".clas. "381".clas.))	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:57
S450	2,257	S447 and S448 and S449	US-PGPUB; USPAT	OR	OFF	2020/10/16 12:57
S451	6,070	(speaker loudspeaker transducer play$5) same orientation.clm.	US-PGPUB; USPAT	OR	ON	2020/10/16 12:57
S452	76	S450 and S451	US-PGPUB; USPAT	OR	ON	2020/10/16 12:57
S453	76	S452	US-PGPUB; USPAT	OR	ON	2020/10/16 12:57
S454	12,285	(h04r5/04 h04r2420/07 h04r2430/01).cpc.	US-PGPUB; USPAT	OR	ON	2020/10/16 13:18
S455	8	"20150289076" "20160219392" "20110163972"	US-PGPUB; USPAT	OR	ON	2020/10/16 13:20
S456	31	("2011/0163972").URPN.	USPAT	OR	ON	2020/10/16 13:39
S457	7,478	(speaker loudspeaker transducer play$5) same orientation.ab,clm.	US-PGPUB; USPAT	OR	ON	2020/10/16 13:43
S458	199	(h04r5/04 h04r2420/07 h04r2430/01).cpc. and S435	US-PGPUB; USPAT	OR	ON	2020/10/16 13:43
S459	8,645	(h04r5/04 h04r2420/07 h04r2430/01).cpc. and S401	US-PGPUB; USPAT	OR	ON	2020/10/16 13:43
S460	282	(h04r5/04 h04r2420/07 h04r2430/01).cpc. and S434	US-PGPUB; USPAT	OR	ON	2020/10/16 13:43
S461	295	(speaker loudspeaker transducer play$5) same orientation.ab,clm. and S459	US-PGPUB; USPAT	OR	ON	2020/10/16 13:45
S462	8	S460 and S461	US-PGPUB; USPAT	OR	ON	2020/10/16 13:45
S463	0	("2010/0310100").URPN.	USPAT	OR	ON	2020/10/16 13:55

S464	2	("9671780" "10386830").pn.	US-PGPUB; USPAT	OR	ON	2020/10/16 14:02
S465	2	("20110312349" "8811630").pn.	US-PGPUB; USPAT	OR	ON	2020/10/16 14:04
S466	28	"Term Removed"	US-PGPUB; USPAT	OR	ON	2020/10/16 15:24
S474	288	crutchfield.in. and ("1" "2" "3" "4" "5")	US-PGPUB; USPAT	OR	ON	2020/10/19 11:47

10/23/2020 2:24:44 PM

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Doc description: Information Disclosure Statement (IDS) Filed

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(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

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	1	20030011128	KR	A	2003-02-06	CHO KAP HOON [KR]		X
	2	03096741	WO	A2	2003-11-20	BRAITHWAITE MICHAEL [US], et al.		☐
	3	2008046530	WO	A2	2008-04-24	FRAUNHOFER GES FORSCHUNG [DE], et al.		☐

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	1	Acoustic Research. 900MHz Wireless Stereo Speakers Model AW871 Installation and Operation Manual, 2003, 15 pages.	
	2	Acoustic Research. 900MHz Wireless Stereo Speakers Model AW871 Installation and Operation Manual, 2007, 12 pages. .	
	3	Acoustic Research. Wireless Stereo Speakers with Auto-Tuning. Model AW877 Installation and Operation Manual, 2007, 13 pages.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	4	Amazon.com: CD30 c300 Wireless Network MP3 Player (Analog/Digital): Home Audio & Theater, 5 pages [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
	5	Amazon.com, Cisco-Linksys Wireless-B Music System WMLS11B, 5 pages [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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Doc description: Information Disclosure Statement (IDS) Filed

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
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Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI, Christopher
Art Unit	2654
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0401-CON1019A

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	7076204		2006-07-11	RICHENSTEIN; Lawrence. et al.	
	2	7716375		2010-05-11	BLUM; Philipp. et al.	

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	1	20060287746		2006-12-21	BRAITHWAITE; Michael. et al.	

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	Attorney Docket Number	11-0401-CON1019A

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	None	

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Examiner Signature	/PAUL C MCCORD/ 10/14/2020	Date Considered	

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/David R. Grosby/	Date (YYYY-MM-DD)	2020-07-29
Name/Print	David R. Grosby	Registration Number	75,912

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Examiner Name	MCCORD, PAUL C
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	1	Wired. Total Remote Control, Issue 11.06, June 2003, 2 pages.	
	2	Wireless USB Adapter 11g CPWUA054, CPWUA054|00, CPWUA054|37, User Manual, Version: 1.0, December 2003, 29 pages.	
	3	Yahoo Finance. BridgeCo Successfully Commercializes its BeBoB Application for the Music Industry: Four Manufacturers Demonstrate BeBoB-enabled Products at NAMM 2004. 16 January 2004, 3 pages.	
	4	Yamaha. Digital Audio Server, MCX-1000, Owner's Manual, 1996-2002, 148 pages.	
	5	Yamaha MusicCAST Digital Audio Server MCX-1000 Owner's Manual, Copyright 1996-2002, 148 pages.	
	6	Yamaha, MusicCAST: Digital Audio Terminal MCX-A10, Owner's Manual. 4 June 2003, 76 pages.	
	7	Yamaha Personal Receiver RP-U200 Operation Manual ("Operation Manual"), Copyright 1992-1997, 57 pages.	
	8	Zero Configuration networking with Bonjour -YouTube available via https://www.youtube.com/watch?v=ZhtZJ6EsCXo 3 pages [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
	9	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 8 July 2004, 62 pages.	
	10	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 1 July 2004, 60 pages.	
	11	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 7 June 2004, 62 pages.	

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	12	Zeroconf Working Group, Dynamic Configuration of Link-Local IPv4 Addresses, Internet-Draft, 16 February 2004, 60 pages.	
	13	Zeroconf Working Group, Dynamic Configuration of Link-Local IPv4 Addresses, Internet-Draft, 31 March 2004, 60 pages.	

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	1	Olenick, Doug. Twice, Networked MP3 Player Lineup Bows from cd3o, 9 January 2003, 2 pages.	
	2	Omnifi A Simple Media Experience. DMSI User Manual, July 2003 36 pages.	
	3	Omnifi DMS1 Wi-Fi Media Receiver Page 2, Sound & Vision, Copyright 2020, 7 pages.	
	4	Omnifi DMS1 Wi-Fi Media Receiver Page 3, Sound & Vision, Copyright 2020, 5 pages.	
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	8	Pohlmann, Ken. Omnifi DMS1 Wi-Fi Media Receiver. Sound & Vision, 20 October 2003, 7 pages.	
	9	Publishing Network Services. Apple Developer Connection. Rendezous Network Services: Publishing Network Services, 12 November 2002, 6 pages.	
	10	Rendezous Network Services: Resolving and Using Network Services. Apple Developer Connection, 12 November 2002, 5 pages.	
	11	Rendezvous Network Services: About Rendezvous. Apple Developer Connection, 12 November 2002, 5 pages.	

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	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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See attached certification statement.

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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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Art Unit	2654
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0401-CON1019A

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	1	7076204		2006-07-11	RICHENSTEIN; Lawrence. et al.	
	2	7716375		2010-05-11	BLUM; Philipp. et al.	

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	1	20060287746		2006-12-21	BRAITHWAITE; Michael. et al.	

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Signature	/David R. Grosby/	Date (YYYY-MM-DD)	2020-07-30
Name/Print	David R. Grosby	Registration Number	75,912

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	1	Sonos, Inc. v. Google LLC. Order 20: Construing the Terms of the Asserted Claims of the Patents at Issue dated 25 September 2020, 53 pages.	

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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-10-13
Name/Print	Brandon J. Kennedy	Registration Number	67894

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: October 13, 2020

By: /Brandon J. Kennedy/
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Electronic Acknowledgement Receipt

EFS ID:	40833606
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	13-OCT-2020
Filing Date:	31-OCT-2019
Time Stamp:	17:52:51
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	Sonos_v_Google_Order_20_Construing_the_Terms_9-25-20_53pages.pdf	664743 8a230feaa6a3659e030d86abdb1a22d23ab08f34	no	53

Warnings:

Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_IDS.pdf	1034293 cd14a13df8630f728478a9aac416835172bea004	no	4
Warnings:					
Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
3	Transmittal Letter	IDS_Transmittal.pdf	83377 f6d34ba0cf24925edd888ebd9efa14a958a8b46a	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	1782413		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)
(MBHB 15-1432-US-CON5)

In the Application of:	)	
	)	
Christopher Kallai, et al.	)	Examiner: MCCORD, PAUL
	)	
Application No.: 16/670,109	)	Group Art Unit: 2654
	)	
Filed: October 31, 2019	)	Confirmation No. 7387
	)	
Title: Playback Device Pairing	)	
	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLACEMENT RESPONSE TO
THE NON-FINAL OFFICE ACTION
MAILED JULY 9, 2020

Please consider the following **AMENDMENTS** and **REMARKS** in response to the Non-Final Office Action mailed on July 9, 2020 in the above-captioned application. This response replaces Applicant's response filed on August 31, 2020.

AMENDMENTS TO THE CLAIMS begin on page 2.

REMARKS begin on page 10.

Because Applicant has filed the present Replacement Response within the shortened statutory 3-month period for reply, Applicant submits that no petition for extension of time or accompanying fees are required. Nevertheless, please charge any underpayment of fees or credit any overpayment of fees in connection with the prosecution of the above-captioned application to Deposit Account 13-2490.

CLAIM AMENDMENTS

1. (Currently Amended) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

~~(i) process the audio data before the playback device outputs audio based on the audio data from the one or more speaker drivers, (ii)~~ (i) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, [[(iii)]] (ii) ~~set an equalization of the playback device by configuring~~ configure the playback device to perform a first ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output two-channel audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices, and [[(iv)]] (iii) change the ~~equalization~~ configuration of the playback device by configuring the playback device to perform a second ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output one-channel audio based on the audio data

from the one or more speaker drivers when the playback device is paired with the one or more other playback devices.

2. (Currently Amended) The playback device of claim 1, wherein performing the first ~~equalization~~ processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second ~~equalization~~ processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Canceled)

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on

audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

~~processing the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers;~~

when the playback device is not paired with the one or more other playback devices, ~~setting an equalization of the playback device by~~ configuring the playback device to perform a first ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the ~~equalization~~ configuration of the playback device by configuring the playback device to perform a second ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output two-channel audio based on the audio data from the one or more speaker drivers.

18. (Currently Amended) The method of claim 17, wherein performing the first ~~equalization~~ processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second ~~equalization~~ processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

~~process the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers;~~

when the playback device is not paired with the one or more other playback devices, ~~set an equalization of the playback device by~~ configuring the playback device to perform a first ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output two-channel audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the ~~an equalization~~ configuration of the playback device by configuring the playback device to perform a second ~~equalization~~ processing of the audio data ~~before outputting~~ so as to output one-channel audio based on the audio data from the one or more speaker drivers.

20. (Currently Amended) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first ~~equalization~~ processing further comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second ~~equalization~~ processing further comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

21. (New) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between

paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

22. (New) The playback device of claim 1, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

23. (New) The tangible, non-transitory computer-readable media of claim 19, wherein changing the configuration of the playback device further comprises one or more of (i) changing a synchronization type between paired devices, (ii) turning on or off at least one of the one or more speaker drivers, (iii) changing a frequency response of one or more speaker drivers, (iv) changing an amplifier gain of an amplifier associated with one or more of the speaker drivers, or (v) changing an amplifier gain of an amplifier of the playback device.

24. (New) The tangible, non-transitory computer-readable media of claim 23, wherein changing the configuration of the playback device further comprises one or more of (i) adjusting a strength of frequencies for the audio data, (ii) adjusting a phase for the audio data, or (iii) adjusting a time-delay for the audio data.

REMARKS

I. Summary of the Claims

Claims 1-20 are pending and allowed; claims 1, 17, and 19 are independent. Without conceding the merits of the rejections, Applicant has (i) amended claims 1-2, 17-18, and 19-20 to further clarify the claim language, and (ii) added new claims 21-24. The subject matter of the amendments can be found generally throughout the originally filed application, including but not limited to ¶¶ 114-115 of Applicant's U.S. Pub. 2020/0084545. No new matter has been added.

II. Summary of the Non-Final Office Action

In the Non-Final Office Action mailed July 9, 2020, the Examiner: (i) contends "Application No. 60/825,407, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application" but that "[t]he recitation of equalization based on pairing in claim 1 is thus considered to resolve Col 9:59-10:15 of Patent number 8483853 and is afforded a filing date of 9/11/2007"; (ii) rejected claims 1, 3, 5-17, and 19 under 35 U.S.C. § 103 based on U.S. Pat. 7,483,538 (McCarty) and U.S. Pub. 2003/0215097 (Crutchfield); and (iii) rejected claims 2, 4, 18, and 20 under 35 U.S.C. § 103 based on McCarty, Crutchfield, and Yamaha DME Designer (DME).

III. Summary of Examiner Interviews on July 17, 2020 and August 17, 2020

A telephonic Examiner-initiated Interview took place on July 17, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the interview, the participants discussed the Examiner's opinion that the claims are entitled to the Sept. 11, 2007 priority date of U.S. App. 8,483,853, and the McCarty, Crutchfield, and DME

references. No demonstrations were conducted and no exhibits were shown. No agreement on the claims was reached.

A telephonic Applicant-initiated Interview took place on August 17, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the interview, the participants discussed the Non-Final Office Action, Applicant's opinion that the claims are entitled to the April 8, 2011 priority date of U.S. App. 13/083,499, claim 1, and the McCarty and Crutchfield references cited in the Non-Final Office Action. No demonstrations were conducted and no exhibits were shown. No agreement on the claims was reached.

IV. Response to the Comments on Priority

The Office Action contends "Application No. 60/825,407, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application" but that "[t]he recitation of equalization based on pairing in claim 1 is thus considered to resolve Col 9:59-10:15 of Patent number 8483853 and is afforded a filing date of 9/11/2007." Office Action, p. 2. In response, Applicant submits that the claimed subject matter has a priority date at least as early as April 8, 2011 and is fully supported by the disclosure in application 13/083,499, filed on April 8, 2011.

IV. Response to the § 103 Rejections based on McCarty and Crutchfield

Applicant requests that the Office withdraw the § 103 rejections based on McCarty and Crutchfield for at least the reason that the combination of McCarty and Crutchfield fails to disclose or suggest all the elements recited in the claims.

For example, and with reference to independent claim 1, the combination of McCarty and Crutchfield fails to disclose or suggest at least "a playback device…determin[ing] that either (a)

the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

A. McCarty fails to disclose or suggest the claimed "determining" step

McCarty fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles."

For this claim element, the Office Action contends that the "type of pairing [is] determined based upon [the] audio format available which configures corresponding speaker number, equalization, volume, etc." Office Action, p. 5 (citing McCarty 9:6-57, 11:5-12:60; Figs 1C, 2, 7, and 8). McCarty discloses an embodiment where an audio module 110 of a center channel speaker 702 "include[s] sound processing logic which identifies the audio channels in the audio signal 108" and "processes the audio signal 108 into the selected channel configuration." McCarty, 9:6-13; 14:55-67. However, McCarty does not describe the center channel speaker 702 (or the audio module 110 component thereof) making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims.

Therefore, McCarty fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the

playback device and the one or more other playback devices have different playback roles" in combination with the other elements recited in the claims.

B. The addition of Crutchfield fails to overcome the deficiencies of McCarty

The addition of Crutchfield fails to overcome the deficiencies of McCarty because, like McCarty, Crutchfield also fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

The Office Action does not cite Crutchfield for disclosing the "determining" feature, and Applicant's review of Crutchfield did not find any disclosure or suggestion of the "determining" step. Therefore, Applicant submits Crutchfield also fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

C. The claims are patentable over McCarty and Crutchfield

In view of the foregoing, independent claim 1 is patentable over McCarty and Crutchfield for at least the reason that McCarty and Crutchfield fail to disclose or suggest all the elements recited in the claims. Independent claims 17 and 19 recite similar elements to independent claim 1, so independent claims 17 and 19 are likewise patentable over McCarty and Crutchfield for similar reasons as claim 1. Further, and without conceding the merits of the other assertions in

the Office Action, the pending dependent claims are patentable over McCarty and Crutchfield for at least the reason that they depend from patentable independent claims.

V. Conclusions

Applicant submits that the claims are in condition for allowance and Applicant requests a Notice of Allowance. If further dialog would advance prosecution, Applicant invites the Office to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: October 7, 2020

By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	3	100	300
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**300**

Electronic Acknowledgement Receipt	
EFS ID:	40788410
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	07-OCT-2020
Filing Date:	31-OCT-2019
Time Stamp:	23:27:22
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$300
RAM confirmation Number	E202007N28284396
Deposit Account	132490
Authorized User	Jeffrey Armstrong
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11-0401-CON1019A_Response.pdf	126404 4cb5382cd27c164eedd19f66ab5c7bb4cd37600c	yes	14
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	9	
	Applicant Arguments/Remarks Made in an Amendment		10	14	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30208 ca0d3139504464a8a9d13ee71971fac09e2ed2f8	no	2
Warnings:					
Information:					
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	None				

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20030215097		2003-11-20	CRUTCHFIELD; William G. Jr.	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	None						

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Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	CobraNet, Programmer's Reference. Version 2.5. February 2006, 147 pages. [Retrieved on 2020-08-31].	
	2	CobraNet, Wikipedia. 9 December 2007, 7 pages [retrieved on 2020-08-31]. [Retrieved from the Internet: https://en.wikipedia.org/wiki/CobraNet].	
	3	EUROPEAN PATENT OFFICE, Summons to Attend Oral Proceedings mailed on 7 September 2020, issued in connection with European Application No. 17198867.8, 10 pages.	
	4	Final Office Action mailed on 24 August 2020, issued in connection with U.S. Patent Application No. 16/773966, filed on 27 January 2020, 22 pages.	
	5	Final Office Action mailed on 4 August 2020, issued in connection with U.S. Patent Application No. 16/422160, filed on 24 May 2019, 12 pages.	
	6	Non-Final Office Action mailed on 22 September 2020, issued in connection with U.S. Patent Application No. 15/405931, filed on 13 January 2017, 17 pages.	
	7	Non-Final Office Action mailed on 6 August 2020, issued in connection with U.S. Patent Application No. 15/130919, filed on 15 April 2016, 17 pages.	
	8	Notice of Allowance mailed on 19 August 2020, issued in connection with U.S. Patent Application No. 16/383561, filed on 12 April 2019, 8 pages.	
	9	Sonos, Inc. v. Google LLC. Respondents' Final Invalidity Contentions [Redacted] dated 4 September 2020, 261 pages.	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-10-02
Name/Print	Brandon J. Kennedy	Registration Number	67,894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Brandon Jacob Kennedy/Jaden Knosher
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	260	260
		Total in USD ($)		**260**

Electronic Acknowledgement Receipt	
EFS ID:	40756269
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	05-OCT-2020
Filing Date:	31-OCT-2019
Time Stamp:	15:16:35
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$260
RAM confirmation Number	E202005F17516835
Deposit Account	506632
Authorized User	Brandon Kennedy
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS_Transmittal.pdf	84200 1f34866364340b2d223fab73705a69691f5b313d	no	1
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20201002164125.pdf	1053903 11b97fc583d2af2842aa745b42037453f2c1158d	no	5
Warnings:					
Information:					
3	Non Patent Literature	16422160_FOA_07-0901-CON0519_8-04-20_12pages.pdf	433088 cc8ddbce1c726cde811f5660e942e487d75592e7	no	12
Warnings:					
Information:					
4	Non Patent Literature	15130919_NFOA_07-0901-CON0416_8-06-20_17pages.pdf	631949 b96a1c54b6bf5ff48bdc44e46a6a540a6df8fe4c	no	17
Warnings:					
Information:					
5	Non Patent Literature	16383561_NOA_07-0901-CON0419A_8-19-20_8pages.pdf	426602 e0b6f06737d339757368d2bccc692b03f264eb9f	no	8
Warnings:					
Information:					
6	Non Patent Literature	16773966_FOA_11-0401S-CON1219_8-24-20_22pages.pdf	854405 91823a58d004ae64a44aea43d3e528974d0088d8	no	22
Warnings:					
Information:					

7	Non Patent Literature	CobraNet_Specification_Programmers_Reference_V2_5_2006_147pages.pdf	10039519 1fef1e78510d1222c97660e45016e8d81126a6ea	no	147
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Information:					
8	Non Patent Literature	CobraNet_Wikipedia_12-9-07_7pages.pdf	563657 50a7b499ee062fc5b5c13ba9a438f18d88d3a724	no	7
Warnings:					
Information:					
9	Non Patent Literature	Sonos_v_Google_Respondents_Final_Invalidity_Contentions_redacted_9-4-20_261pages.pdf	8540365 4583a6c76da5e257c4c59deb093dcf32261d1270	no	261
Warnings:					
Information:					
10	Non Patent Literature	171988678_EP_Summons_11-0401-EP-DIV3_9-7-20_10pages.pdf	4651528 8bf5c51ecbc4bbf19c2c37712256da3f9d05f2df	no	10
Warnings:					
Information:					
11	Non Patent Literature	15405931_NFOA_14-0601-CON0117_09-22-20_17pages.pdf	558084 28a53382ae54a99a2ccf09e48bfc48f92dd07489	no	17
Warnings:					
Information:					
12	Fee Worksheet (SB06)	fee-info.pdf	30589 869f119d09656bb0422d1a58cd0e738e52c4cc3a	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	27867889		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: October 2, 2020

By: /Brandon J. Kennedy/
Brandon J. Kennedy
Reg. No. 67,894
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9315
kennedy@ls3ip.com

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)
(MBHB 15-1432-US-CON5)

In the Application of:	)	
	)	
Christopher Kallai, et al.	)	Examiner: MCCORD, PAUL
	)	
Application No.: 16/670,109	)	Group Art Unit: 2654
	)	
Filed: October 31, 2019	)	Confirmation No. 7387
	)	
Title: Playback Device Pairing	)	
	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO THE NON-FINAL OFFICE ACTION
MAILED JULY 9, 2020

Please consider the following in response to the Non-Final Office Action mailed on July 9, 2020 in the above-captioned application.

AMENDMENTS TO THE CLAIMS begin on page 2.

REMARKS begin on page 9.

Please charge any underpayment of fees or credit any overpayment of fees in connection with the prosecution of the above-captioned application to Deposit Account 13-2490.

Electronic Acknowledgement Receipt

EFS ID:	40424218
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	31-AUG-2020
Filing Date:	31-OCT-2019
Time Stamp:	11:55:53
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		11-0401-CON1019A_Response.pdf	122202 39967839fa50083c5283b3ba25cc167e753bf0ec	yes	13

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Applicant Arguments/Remarks Made in an Amendment	9	13
	Claims	2	8
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
Warnings:			
Information:			
	Total Files Size (in bytes):	122202	

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National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

REMARKS

I. Summary of the Claims

Claims 1-20 are pending and allowed; claims 1, 17, and 19 are independent. Applicant has amended claims 1, 17, and 19 to further clarify the claim language.

II. Summary of the Non-Final Office Action

In the Non-Final Office Action mailed July 9, 2020, the Examiner: (i) contends "Application No. 60/825,407, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application" but that "[t]he recitation of equalization based on pairing in claim 1 is thus considered to resolve Col 9:59-10:15 of Patent number 8483853 and is afforded a filing date of 9/11/2007"; (ii) rejected claims 1, 3, 5-17, and 19 under 35 U.S.C. § 103 based on U.S. Pat. 7,483,538 (McCarty) and U.S. Pub. 2003/0215097 (Crutchfield); and (iii) rejected claims 2, 4, 18, and 20 under 35 U.S.C. § 103 based on McCarty, Crutchfield, and Yamaha DME Designer (DME).

III. Summary of Examiner Interviews on July 17, 2020 and August 17, 2020

A telephonic Examiner-initiated Interview took place on July 17, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the interview, the participants discussed the Examiner's opinion that the claims are entitled to the Sept. 11, 2007 priority date of U.S. App. 8,483,853, and the McCarty, Crutchfield, and DME references. No demonstrations were conducted and exhibits were shown. No agreement on the claims was reached.

A telephonic Applicant-initiated Interview took place on August 17, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the interview, the participants discussed the Non-Final Office Action, Applicant's opinion that the claims are entitled to the April 8, 2011 priority date of U.S. App. 13/083,499, claim 1, and the McCarty and Crutchfield references cited in the Non-Final Office Action. No demonstrations were conducted and exhibits were shown. No agreement on the claims was reached.

IV. Response to the Comments on Priority

The Office Action contends "Application No. 60/825,407, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application" but that "[t]he recitation of equalization based on pairing in claim 1 is thus considered to resolve Col 9:59-10:15 of Patent number 8483853 and is afforded a filing date of 9/11/2007." Office Action, p. 2. In response, Applicant submits that the claimed subject matter has a priority date at least as early as April 8, 2011 and is fully supported by the disclosure in application 13/083,499, filed on April 8, 2011.

IV. Response to the § 103 Rejections based on McCarty and Crutchfield

Applicant requests that the Office withdraw the § 103 rejections based on McCarty and Crutchfield for at least the reason that the combination of McCarty and Crutchfield fails to disclose or suggest all the elements recited in the claims.

For example, and with reference to independent claim 1, the combination of McCarty and Crutchfield fails to disclose or suggest at least "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback

device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

A. McCarty fails to disclose or suggest the claimed "determining" step

McCarty fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles."

For this claim element, the Office Action contends that the "type of pairing [is] determined based upon [the] audio format available which configures corresponding speaker number, equalization, volume, etc." Office Action, p. 5 (citing McCarty 9:6-57, 11:5-12:60; Figs 1C, 2, 7, and 8). McCarty discloses an embodiment where an audio module 110 of a center channel speaker 702 "include[s] sound processing logic which identifies the audio channels in the audio signal 108" and "processes the audio signal 108 into the selected channel configuration." McCarty, 9:6-13; 14:55-67. However, McCarty does not describe the center channel speaker 702 (or the audio module 110 component thereof) making any sort of determination that it is "either (a) … not paired with the one or more other playback devices or (b) … is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" as in the claims.

Therefore, McCarty fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles" in combination with the other elements recited in the claims.

B. The addition of Crutchfield fails to overcome the deficiencies of McCarty

The addition of Crutchfield fails to overcome the deficiencies of McCarty because, like McCarty, Crutchfield also fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

The Office Action does not cite Crutchfield for disclosing the "determining" feature, and Applicant's review of Crutchfield did not find any disclosure or suggestion of the "determining" step. Therefore, Applicant submits Crutchfield also fails to disclose or suggest "a playback device…determin[ing] that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles" in combination with the other elements recited in the claims.

C. The claims are patentable over McCarty and Crutchfield

In view of the foregoing, independent claim 1 is patentable over McCarty and Crutchfield for at least the reason that McCarty and Crutchfield fail to disclose or suggest all the elements recited in the claims. Independent claims 17 and 19 recite similar elements to independent claim 1, so independent claims 17 and 19 are likewise patentable over McCarty and Crutchfield for similar reasons as claim 1. Further, and without conceding the merits of the other assertions in the Office Action, the pending dependent claims are patentable over McCarty and Crutchfield for at least the reason that they depend from patentable independent claims.

V. Conclusions

Applicant submits that the claims are in condition for allowance and Applicant requests a Notice of Allowance. If further dialog would advance prosecution, Applicant invites the Office to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: August 31, 2020 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

CLAIM AMENDMENTS

1. (Currently Amended) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles; and

(i) process the audio data before the playback device outputs audio based on the audio data from the one or more speaker drivers, (ii) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, (iii) set an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices, and (iv) change the equalization of the playback device by configuring the playback device to perform a second equalization of the audio data before outputting audio based on the audio data from the one or

more speaker drivers when the playback device is paired with the one or more other playback devices.

2. (Original) The playback device of claim 1, wherein performing the first equalization comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second equalization comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

3. (Original) The playback device of claim 1, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices.

4. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio comprising two channel sound via the one or more speaker drivers, and wherein, when the playback device is paired with one or more playback devices, the playback device is configured to output audio comprising no more than one channel of the two channel sound via the one or more speaker drivers.

5. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to

output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode.

6. (Original) The playback device of claim 1, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode.

7. (Original) The playback device of claim 1, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data.

8. (Original) The playback device of claim 1, wherein the network is a wireless network.

9. (Original) The playback device of claim 1, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to:

output audio from the plurality of speaker drivers.

10. (Original) The playback device of claim 1, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data.

11. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network.

12. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network.

13. (Original) The playback device of claim 1, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network.

14. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices.

15. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

detect a predefined event; and

interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected.

16. (Original) The playback device of claim 1, wherein the instructions, when executed by the one or more processors, further cause the playback device to:

receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices.

17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receiving audio data over the network;

processing the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers;

when the playback device is not paired with the one or more other playback devices, setting an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, changing the equalization of the playback device by configuring the playback device to perform a second equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers.

18. (Original) The method of claim 17, wherein performing the first equalization comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second equalization comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to become paired with one or more other playback devices such that, after pairing, the playback device and the one or more other playback devices have different playback roles;

receive audio data over the network;

process the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers;

when the playback device is not paired with the one or more other playback devices, set an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have the different playback roles, change the equalization of the playback device by configuring the playback device to perform a second equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers.

20. (Original) The tangible, non-transitory, computer readable memory of claim 19, wherein performing the first equalization comprises utilizing at least a first one or more pass-filter parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second equalization comprises utilizing at least a second one or more pass-filter parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different.

PTO/SB/06 (09-11)
Approved for use through 1/31/2014. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/670,109	Filing Date 10/31/2019	☐ To be Mailed

ENTITY: ☑ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $100 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $460 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	08/31/2020	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		x $100 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $460 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/VINCENT S BUTLER/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 08/20/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
08/20/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Applicant-Initiated Interview Summary	**Application No.** 16/670,109	**Applicant(s)** Kallai et al.	
	Examiner PAUL C MCCORD	**Art Unit** 2654	**AIA (FITF) Status** No

All participants (applicant, applicants representative, PTO personnel):

(1) PAUL C. MCCORD. (3) _____.

(2) JEFFREY ARMSTRONG. (4) _____.

Date of Interview: 17 August 2020.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☑103 ☑Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: McCarty.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Discussed non-final action and priority date. No agreement was reached.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiners responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicants correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,-
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicants record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiners version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, Interview Record OK on the paper recording the substance of the interview along with the date and the examiners initials.

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI, Christopher
Art Unit	2654
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	7076204		2006-07-11	RICHENSTEIN; Lawrence. et al.	
	2	7716375		2010-05-11	BLUM; Philipp. et al.	

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060287746		2006-12-21	BRAITHWAITE; Michael. et al.	

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FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	None						

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI, Christopher
	Art Unit	2654
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0401-CON1019A

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	None	

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EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI, Christopher
	Art Unit	2654
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☒ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/David R. Grosby/	Date (YYYY-MM-DD)	2020-07-29
Name/Print	David R. Grosby	Registration Number	75,912

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).

5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	40142431
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	David Rittenhouse Grosby
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	30-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	08:40:42
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS_Transmittal.pdf	69691 360a3200afaaf774d312e4fc3ae68cc3ebbb6b74	no	2

Warnings:

Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20200729153838.pdf	1053252 912d0241ff911c43009343ba5dc9a63db97aad0a	no	4
Warnings:					
Information:					
			Total Files Size (in bytes):	1122943	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: July 29, 2020

By: /David R. Grosby/
David R. Grosby
Reg. No. 75,912
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9423
grosby@ls3ip.com

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI, Christopher
Art Unit	2654
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	7076204		2006-07-11	RICHENSTEIN; Lawrence. et al.	
	2	7716375		2010-05-11	BLUM; Philipp. et al.	

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS Remove

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20060287746		2006-12-21	BRAITHWAITE; Michael. et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS Remove

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	None						

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI, Christopher
	Art Unit	2654
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0401-CON1019A

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	None	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI, Christopher
	Art Unit	2654
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

☒ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/David R. Grosby/	Date (YYYY-MM-DD)	2020-07-30
Name/Print	David R. Grosby	Registration Number	75,912

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.

2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	David Rittenhouse Grosby/Jaden Knosher
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	240	240
		Total in USD ($)		**240**

Electronic Acknowledgement Receipt	
EFS ID:	40153250
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	David Rittenhouse Grosby
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	30-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	16:26:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$240
RAM confirmation Number	E20207TG26549767
Deposit Account	506632
Authorized User	David Grosby
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS_Transmittal.pdf	71682 180a76fe3206e375ad44c96bd8957efa5ef968dc	no	2
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20200729153838.pdf	1053268 1d663d3490ea0ab540e7d05c2250a31d9490c633	no	4
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30704 146f21d21f86f2bbed213319d5114bf0afd30786	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	1155654		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

An Information Disclosure Statement (IDS) was submitted earlier today in conjunction with this application. However, the IDS inadvertently contained a certification statement and was submitted without a fee, whereas the IDS should not have contained a certification statement and should have been submitted with the appropriate fee set forth in 37 C.F.R. 1.17(p). Applicant hereby submits the attached replacement IDS and corresponding fee to address this inadvertent error.

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: July 30, 2020

By: /David R. Grosby/

David R. Grosby
Reg. No. 75,912
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9423
grosby@ls3ip.com

Electronic Acknowledgement Receipt

EFS ID:	40104365
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:42:18
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	HomePod_User_Manual_2003_49pages.pdf	13828178 20815c720c505d131d96d823dab952f1e34daf38	no	49

Warnings:

Information:					
2	Non Patent Literature	NewsRoom_New_Products_11-9-03_3pages.pdf	2096469 feb5ccbdee6bccef789ea1b915f435aeb01dd524	no	3
Warnings:					
Information:					
3	Non Patent Literature	NewsRoom_Newman_All-in-One_1-9-20_3pages.pdf	1444562 938c288739c17ad1974061cf65770737eb57bb67	no	3
Warnings:					
Information:					
4	Non Patent Literature	NewsRoom_Norris_Come_Over_1-23-03_3pages.pdf	1757301 57a60342876a4335bc3a6343459690697489 3501	no	3
Warnings:					
Information:					
5	Non Patent Literature	OMNIfi_DMSI_User_Manual_7-03_36pages.pdf	17256550 1f35fcf43489184befb1247f958fd3921e7b2af9	no	36
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6	Non Patent Literature	Guttman_An_API_for_the_Zeroconf_6-6-01_11pages.pdf	3952428 c200ff89893d20b67b0cdd35f1e040761cb80716	no	11
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Information:					
7	Non Patent Literature	NewsRoom_On_the_printer_trail_10-13-03_5pages.pdf	3556013 37519c294f907f60a274324355c675a11e1643a7	no	5
Warnings:					
Information:					
8	Non Patent Literature	NewsRoom_One_way_to_Organize_5-8-03_3pages.pdf	1665465 ad8704d11b355480327d561b981226a8a1840196	no	3
Warnings:					
Information:					

9	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part1.pdf	20878167 ec2258b8642bed835dfb28664bed2f7331c5deff	no	141
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Information:					
10	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part2.pdf	20843864 2315fb88e4bebd29a97584ed94cf1c828b98df93	no	157
Warnings:					
Information:					
11	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part3.pdf	20953113 80f0bc504ecce652075d6013641bc7e2f0cae8c5	no	166
Warnings:					
Information:					
12	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part4.pdf	20920966 6bf49aa246715f7d6c359021acbd7e7a6285f72c	no	168
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Information:					
13	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part5.pdf	20964394 db237084b9f53fe5105d48a889e509fbca2176ab	no	162
Warnings:					
Information:					
14	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part6.pdf	20950675 e1519531c4d656dc64b58b077eed0e94e79eeb87	no	159
Warnings:					
Information:					
15	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part7.pdf	20892989 2e6cd1746df4e86f3231178f0ac92b3d217258c7	no	164
Warnings:					
Information:					

16	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part8.pdf	20840008 d8626e684ac596587610963665 5dea406fb93517	no	159
Warnings:					
Information:					
17	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part9.pdf	20947859 b8d40f8c48574cc16315bb56a4c647a94eeab3a9	no	160
Warnings:					
Information:					
18	Non Patent Literature	IEEE_802_3_Part_3_Carrier_sense_multiple_3-8-02_1562pages_Part10.pdf	16803831 4902138afb5ed864e3e8336fb8db47a27c581593	no	126
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Information:					
19	Non Patent Literature	NewsRoom_Marlowe_10-20-03_2pages.pdf	1259121 4e04c6eb568f2b9dbed08f2d0b60f56beec91228	no	2
Warnings:					
Information:					
20	Non Patent Literature	NewsRoom_Mossberg_1-25-04_2pages.pdf	1199357 968aa1531deffd2bdf6bec3b0d6343cc1cd2172d	no	2
Warnings:					
Information:					
21	Non Patent Literature	Pinnacle_ShowCenter_132pages.pdf	18333338 d3ab3d2035e2f19e4c5d371033eae00f8103162b	no	132
Warnings:					
Information:					
22	Non Patent Literature	Dynamic_Configuration_of_Link-Local_IPv4_2-16-04_60pages.pdf	17014515 7182226ace0f6c44b153f32743a859e1ac9e27e9	no	60
Warnings:					
Information:					

23	Non Patent Literature	Dynamic_Configuration_of_Link-Local_IPv4_3-31-04_60pages.pdf	17177818 17b84aefe380b5f5e540d4f9b9a538d36d809c1b	no	60
Warnings:					
Information:					
24	Non Patent Literature	Dynamic_Configuration_of_Link-Local_IPv4_6-7-04_62pages.pdf	17461089 9b1789ef027117eb63f7ea411a01fba0105b4255	no	62
Warnings:					
Information:					
25	Non Patent Literature	Dynamic_Configuration_of_Link-Local_IPv4_7-1-04_60pages.pdf	17133724 a3e124b8d29a44bd77b356c422c3d8555baad7a2	no	60
Warnings:					
Information:					
26	Non Patent Literature	Dynamic_Configuration_of_Link-Local_IPv4_7-8-04_62pages.pdf	17462304 df6815bd6a033db3a92fbd12af1159c72bfdf9e7	no	62
Warnings:					
Information:					
27	Non Patent Literature	Williams_Requirements_for_Automatic_Conf_9-19-02_19pages.pdf	7804192 46fd943e5c3f9fd496303edbe2257ae64b0903a7	no	19
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31	Non Patent Literature	Newsroom_Receiver_lets_stereo_4-10-03_2pages.pdf	1057732 2f5b31474d6912c4acaf30239c8380bd0eb8d398	no	2
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32	Non Patent Literature	Rendezous_Network_Services_11-12-02_5pages.pdf	3362849 32d8ba7a3188933b34c360c5b6b79796dac6c3e8	no	5
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35	Non Patent Literature	Guttman_Zeroconf_Host_Profile_Applicability_7-20-01_9pages.pdf	3824112 c3de414bc5a478abca4ff85c60e26b0d1646c58f	no	9
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36	Non Patent Literature	Cheshire_RFC_3927_2005_34pages.pdf	1585938 0257d4e52d843f96d487a8bb663c310320166f57	no	34
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37	Non Patent Literature	NewsRoom_Innovations_Haste n_Trend_1-16-03_4pages.pdf	1670238 dcd2e1cc02e71392cd28659f0818370dcf4f 4d20	no	4
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38	Non Patent Literature	Case_RFC_1157_Simple_Netw ork_1990_36pages.pdf	16021442 b2181e342b51c10c2707dbcf42484ca0cd4 33380	no	36
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39	Non Patent Literature	Intel_Announces_WS-Discovery_Spec_2-17-04_4pag es.pdf	2019756 715a419730f27e404c3faa19763b480f2115 1dec	no	4
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40	Non Patent Literature	NewsRoom_Intel_Fund_to_Inv est_1-7-04_2pages.pdf	778356 c13e29f2065c3efa2f3f163b27513e39d232 76e3	no	2
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41	Non Patent Literature	Intel_Sees_Unified_Platform_a nd_Ecosystem_2-17-04_4page s.pdf	1804401 e62c59a614a7b7916792e7548382a9994c9 30248	no	4
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43	Non Patent Literature	NewsRoom_Inventions_Real_S tars_1-13-03_4pages.pdf	1831860 02c1ebaa605181de0df337fb0b1162f4f977 7cca	no	4
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44	Non Patent Literature	Dierks_RFC_2246_TLS_Protocol_1999_80pages.pdf	11517310 5dd06a06e16ed46b8c273e10af4c1f6e851da52a	no	80
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45	Non Patent Literature	Fielding_RFC_2616_1999_114pages.pdf	7108439 79a7bb3a7c439168e9f491571f06cd6494ef2a1c	no	114
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46	Non Patent Literature	Linksys_Wireless_Adapters_2003_2pages.pdf	363542 6b59efff74408972bc9584fbc9f2f19a874d1ccb	no	2
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47	Non Patent Literature	Roku_SoundBridge_v2_5_2006_40pages.pdf	12004547 cdc713e68e450be4e10412866d5824d8ee3fa155	no	40
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48	Non Patent Literature	Clipsal_Multi_Room_Audio_Users_Guide_v1_2005_28pages.pdf	5877604 3de0d429c61f60e54f74427b5e3c2747ff16a1e1	no	28
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49	Non Patent Literature	NewsRoom_Greg_Rooms_7-23-03_3pages.pdf	1592722 9ccda8d23463308ad35c3a31be2bd880b3c00d16	no	3
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50	Non Patent Literature	Clipsal_Multi_Room_Audio_Matrix_Users_Guide_2005_20pages.pdf	4133374 981415734c68642c3ac68288d44570fd9f3f6908	no	20
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51	Non Patent Literature	Rose_Home_Networks_IEEE_Dec_01_8pages.pdf	877377 4dd2409bf9d459d6d3f995e85fb3e5b1b7d410b3	no	8
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52	Non Patent Literature	NewsRoom_Honorable_mentions_worth_a_look_11-20-03_2pages.pdf	552373 0834399080071fc4a17effc700c7fc871b2e4e080	no	2
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53	Non Patent Literature	NewsRoom_Science_and_Tech_Wired_1-14-04_3pages.pdf	2412496 e9886cb4b325911efa770699f1e18968df607188	no	3
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54	Non Patent Literature	Godher_Secure_Wireless_Gateway_pages_41-46.pdf	6097199 d6ac8c53b2e99aa1f554464c62fb8491be62d586	no	6
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55	Non Patent Literature	NewsRoom_Shaw_Cool_1-20-03_2pages.pdf	1313519 487d01fa7d3a2a1e90f7c1706a93feb412fe0a85	no	2
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56	Non Patent Literature	NewsRoom_Sidener_7-14-03_2pages.pdf	1009834 db3f58b6f83e9a7ee399e8da0081e10d78a23c1f	no	2
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57	Non Patent Literature	HomePod_MP-100_Wireless_Network_Music_Player_Spec_2003_2pages.pdf	917295 c4c5371331afcdd644ea032796d15b989abdaf61	no	2
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58	Non Patent Literature	Sieborger_Multiprotocol_Control_Feb_2004_131pages.pdf	9301690 152de385c6ce7d173ac8af8ba1edaafb818dae9d	no	131
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59	Non Patent Literature	14516883_Pre-Interview_FAI_04-0401-CON1014C_6-22-17_4pages.pdf	1884631 0e03aed6fe5e35eb5fa9154b861d5b1bae5dc972	no	4
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60	Non Patent Literature	SMC_EZ-Stream_Nextup_12-5-03_4pages.pdf	2932800 ea1e0de151ee8c71251fa225c36c1c149d0beaef	no	4
Warnings:					
Information:					
		Total Files Size (in bytes):	487026922		

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<u>New Applications Under 35 U.S.C. 111</u>
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
<u>National Stage of an International Application under 35 U.S.C. 371</u>
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
<u>New International Application Filed with the USPTO as a Receiving Office</u>
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Acknowledgement Receipt

EFS ID:	40104386
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:43:22
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	NewsRoom_Yamaha_Musiccast_12-1-03_2pages.pdf	435559 b300c731a997c87a2c30daaba3d97185c401897b	no	2

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2	Non Patent Literature	Johnson_SMC_Ez-Stream_12-03-03_6pages.pdf	1034330 36f5f9183c979c9a6a280d8198db762ee1d157ad	no	6
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3	Non Patent Literature	SMC_Networks_Consumer_Site_2-21-04_2pages.pdf	1268770 386ed049e90dd946044f026f7be1fc43463b2008	no	2
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4	Non Patent Literature	SMC_Networks_Products_2-7-04_1page.pdf	455894 23c7a49f0561f582b7e29e9b72d9ef8cec8c03ce	no	1
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5	Non Patent Literature	Yamaha_Digital_Audio_Server_Owners_Manual_1996-2002_148pages_Part1.pdf	20738269 0484f5071a1313b82d5bdb7366fde5bd3cd0a7a6	no	79
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7	Non Patent Literature	SMC_Networking_Products_12-10-03_1page.pdf	413178 79af55e549086abcf08364706d9c8344f11c6e90	no	1
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8	Non Patent Literature	Linksys_Wireless_PrintServer_User_Guide_2002_31pages.pdf	14889639 aaa9eab75884e6ddd2a8aa7d061da260309f892b	no	31
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9	Non Patent Literature	SMC_Networks_Support_2-7-04_1page.pdf	388350 a73c1f2361fb188737304a53a42dee9aaf9cb031	no	1
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10	Non Patent Literature	SMC_GT_1255FTX_SC_EZ_2-5-04_7pages.pdf	2978077 de38f703d1b321d566adbbe03e900603c59cd824	no	7
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11	Non Patent Literature	Linksys_Wireless-B_Product_Data_WMA11B_2003_2pages.pdf	938398 6cef4cf069061bb5a0e3936f49594b72caccc6e0	no	2
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12	Non Patent Literature	Linksys_Wireless-B_Media_Adapter_WMA11B_2003_2pages.pdf	609660 2bd3bf92e4283a760d290b136a38fcbd3bf64f43	no	2
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13	Non Patent Literature	NewsRoom_SMC_Ships_EZ_80211ag_1-14-04_3pages.pdf	2240517 19374c685e9255c0d0b5b64f9343095f178e7507	no	3
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15	Non Patent Literature	SMC_Networks_SMCWAAB_User_Guide_2004_51pages.pdf	7644797 c70a3ea6b53db4b2dd142915532eb5cdca24adc4	no	51
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16	Non Patent Literature	Wireless_USB_Adapter_11g_User_Manual_V1_2003_29pages.pdf	8444733 d39d4bf3c706420a1bdae5f8b85b49aa61be72db	no	29
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17	Non Patent Literature	NewsRoom_Wireless_Technology_Focus_1-9-03_4pages.pdf	1604648 d210cdfafdebf89a52ef48008b1e1c0e181518d0	no	4
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18	Non Patent Literature	SMC_Networks_SMCWMR-AG_2003_43pages.pdf	3047278 5003760444ad0c06d4081823d09f64c3b022b828	no	43
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19	Non Patent Literature	Wilkins_SMC_SMCWMR-AG_2-804_3pages.pdf	1583082 8e7b5060e2a7d186ccf1a2dd874f3d5970650604	no	3
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23	Non Patent Literature	NewsRoom_SMC_Sponsors_Home_Design_1-6-04_3pages.pdf	2081205 d35ffdde789e6e67e0bee3e621771b12c0e93fd1	no	3
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24	Non Patent Literature	NewsRoom_SMC_Teams_with_Get_Digital_2-23-04_3pages.pdf	2096345 0279fcfebb3cc6155d72bf309f49656692a56b2f	no	3
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26	Non Patent Literature	NewsRoom_SMC_Offer_Home_Entertainment_11-03-03_3pages.pdf	1910408 378618edaf19caf2741a17a4b30aa20727923521	no	3
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27	Non Patent Literature	SMC_Networks_EZ_Stream_SMCWMR-AG_Users_Manual_60pages.pdf	20006408 0557f24280cea7465e1dbb2ad0f9c20d3dd66f79	no	60
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31	Non Patent Literature	NewsRoom_Evangelista_6-6-03_3pages.pdf	1763778 7f508117637b2bc88a76d39f300492b656b04977	no	3
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33	Non Patent Literature	Amazon_Creative_Labs_Sound_Blater_7pages.pdf	2601941 09ae04f2e2d7cd2f2c3cfe124ff999162795995a	no	7
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34	Non Patent Literature	Sound_Blaster_Wireless_Music_User_Guide_2003_66pages.pdf	12680586 5e804e3f79ccbfaefb772bad9251ccb92d8e86bf	no	66
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36	Non Patent Literature	NewsRoom_Wireless_Stream_Player_Hits_the_Right_Notes_1-17-04_3pages.pdf	1228916 4b964c7c4b7361a1599eb7f338cafc0626f331ff	no	3
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37	Non Patent Literature	NewsRoom_Wireless_Solution_for_Stereo_Sound_8-7-03_3pages.pdf	1111508 bcd4b24ab913169eb0f9a3fc38eedbaf4173ae0f	no	3
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39	Non Patent Literature	CNET_Wireless_Gizmo_for_PC_Music_9-30-03_4pages.pdf	1218786 849ae22cd8f581c94cf0058fa89b135fc72aa381	no	4
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41	Non Patent Literature	cd30_Network_MP3_Players_Stream_11-18-03_1page.pdf	423133 3b2420a6614a239f85c3e661d5eae1b34a662f0a	no	1
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46	Non Patent Literature	spacecom_Tech_today_2-14-04_2pages.pdf	1456519 ead532b96dfb42d8e3af628343a1075a2408c0f6	no	2
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47	Non Patent Literature	Williams_NewsRoom_Going_Wireless_10-21-03_2pages.pdf	850672 dbbcb22fc304db0521eec3fa4b89ca1a528720d2	no	2
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48	Non Patent Literature	NewsRoom_Miller_Technology_Gets_Simpler_1-14-03_2pages.pdf	1278251 a90fa1a16c06f49e89b4c3f15296335799e00354	no	2
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51	Non Patent Literature	Blau_Wi-Fi_Hotspot_Networks_Sprout_2002_3pages.pdf	2322232 c4fd08aee32e14b4b989652dfe13cd4ba2dcd9d5	no	3
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52	Non Patent Literature	Williams_NewsRoom_As_Wireless_Evolves_Compatibility_Is_Key_7-21-2003_3pages.pdf	1215369 9cc217294f0296b4ea0be0ac60d99279f1bfb593	no	3
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53	Non Patent Literature	NewsRoom_What_we_want_heres_the_gear_12-1-03_8pages.pdf	2934389 0303a1e56245ab59673698d6c21d021fd7aaa25a	no	8
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54	Non Patent Literature	Beatty_et_al_Web_Services_Dynamic_Discovery_2004_35pages.pdf	13900895 98643b44d47e3cfd21c5054387c27ae38c4beeda	no	35
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55	Non Patent Literature	NewsRoom_Televisions_defy_hi-tech_2-19-04_3pages.pdf	1419007 bbeaba8391619217539368411e21732478d1efe9	no	3
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56	Non Patent Literature	Thaler_Scalability_IEEE_9-21-24-01_3pages.pdf	1914638 3eb4f01cee4a804b924aff4280d5241af93a370c	no	16
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57	Non Patent Literature	NewsRoom_the_50_best_music_systems_12-13-03_15pages.pdf	8570193 52fce644a6fa941a053a7c27e10b870354c0b7c5	no	15
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58	Non Patent Literature	NewsRoom_Fallon_The_goods_7-31-03_2pages.pdf	1299207 720df0559b31fd34b83924eac1ca0601f9d30fc2	no	2
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Information:					
59	Non Patent Literature	NewsRoom_Ask_the_Computer_Guy_1-11-04_2pages.pdf	643430 e22d92f5d8c0ab95c41339c9052ad239eb1aefac	no	2
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60	Non Patent Literature	NewsRoom_Wall_Street_Journal_Digest_1-15-04_3pages.pdf	1378705 c883257d74d977a3b6168663433c2f093d6d6474	no	3
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Information:					
		Total Files Size (in bytes):	221383926		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Acknowledgement Receipt

EFS ID:	40104334
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:41:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	IPR_Details_4-26-04_3pages.pdf	614353 e30c5860e76f07c1542773ba0c8a3724f2f98c46	no	3

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2	Non Patent Literature	Kostianen_Intuitive_Security_4-14-04_86pages.pdf	23442262 c052c3c9e4db5704Bbe8af6e0533150f6d3a977d	no	86
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3	Non Patent Literature	NewsRoom_Latest_electronic_gadgets_1-13-03_4pages.pdf	1963194 056b98f6837bab073ff30f09ec29796518457e74	no	4
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4	Non Patent Literature	Compaq_Universal_Serial_Bus_Spec_4-27-2000_650pages_Part1.pdf	20948085 bfe187b57620d255c2d72d8efdd0d58a0e22e478	no	328
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5	Non Patent Literature	Compaq_Universal_Serial_Bus_Spec_4-27-2000_650pages_Part2.pdf	17688182 1482414ff46c16ae2859d21c3630eea1b2149b24	no	322
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6	Non Patent Literature	Linksys_Quick_Installation_XP_2pages.pdf	1007568 ff28ade1a591bd5604a46e16edf2434b6805b23a	no	2
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7	Non Patent Literature	NewsRoom_CSR_and_BridgeCo_Launch_Design_5-6-03_3pages.pdf	1560002 b97a93ef443ad3fa43ad11ce074a1e48cc6e37bd	no	3
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8	Non Patent Literature	NewsRoom_Cutting_the_Cord_2-2-03_5pages.pdf	2479622 ad42054616a1999a9109c7b90c3f7e56008d6c7c	no	5
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9	Non Patent Literature	D-Link_Manual_Ver1-1_DSM-520_9-28-05_127pages.pdf	13821559 6b090c41897345ebb417e5e7772515fac913bcdf	no	127
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10	Non Patent Literature	Apple_Developers_Rapidly_Adopt_9-10-02_3pages.pdf	1000875 851c3daba83e29f5ebaf7c6f4d84be177cab7008	no	3
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11	Non Patent Literature	DLNA_Overview_and_Vision_2004_16pages.pdf	6710014 08a3bf0bada2ccda84c04b42c5cde2747433bde1	no	16
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12	Non Patent Literature	DLNA_Use_Case_Scenarios_2004_15pages.pdf	4997779 16f4e9672c700455fdb3c3014c0f6c2b92da48a6	no	15
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13	Non Patent Literature	NewsRoom_Easy_Listening_5-1-03_3pages.pdf	1725468 ead53ca7c9cff3e6a242dd1112b99df3d8c3969c	no	3
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14	Non Patent Literature	ECMA-340_Near_Field_Communication_2002_66pages.pdf	18995664 6021b475601e16814e19d21d10e982f25d29d848	no	66
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15	Non Patent Literature	ECMA_What_is_ECMA_2pages.pdf	489663 db1819cdf50a08d90596cb91f1393467590930ca	no	2
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16	Non Patent Literature	Linksys_2_4GHz_68pages.pdf	12551263 83cdd54cfaff514a861b7f6cfba1ee6dba83fe53	no	68
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17	Non Patent Literature	ECMA_TC32-TG19_2002_15pages.pdf	2952521 6600d7fd237d978304310ef776f3815577183427	no	15
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18	Non Patent Literature	Linksys_2_4_CHz_WML11B-WMLS11B_68pages.pdf	11816474 6b33ade62f68b4c9f3c251fad6d6278efb12c5ef	no	68
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21	Non Patent Literature	NewsRoom_Linksys_Hot_Tech_Gifts_11-24-03_3pages.pdf	1766334 4bb6ac5bd7bc1179833bdc581fe77256c1cbfc6d	no	3
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22	Non Patent Literature	Linksys_Wireless-B_Media_Adpater_2003_32pages.pdf	6648049 86c6131c99b79a6f4bd0a75750e2a98c51e77ac3	no	32
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23	Non Patent Literature	EdgeReview_CES_2003_1-28-03_2pages.pdf	870754 8406e18f7e10c38b4d3273b1c5ede54df8168eda	no	2
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24	Non Patent Literature	NewsRoom_Linksys_Streamlined_Delivery_5-19-04_3pages.pdf	2003318 2313326dfc4b7481f670aed26cbad07dccaf0c84	no	3
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25	Non Patent Literature	NewsRoom_Wi-Fi_meets_Hi-Fi_11-1-03_5pages.pdf	2461785 e992ffa64f830d4cf09897935c230a00e389afa9	no	5
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26	Non Patent Literature	Buffalo_LinkTheater_PC-P3LWGDVD_59pages.pdf	9244567 729306df6cd3e8bebd52ad8a63abb15d811cc5b2	no	59
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27	Non Patent Literature	NewsRoom_PC_word_processor_8-14-03_4pages.pdf	2170024 1872c216ba71787d0155594fa488d5daa857020c	no	4
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28	Non Patent Literature	NewsRoom_Entertainment_Geekly_11-1-03_6pages.pdf	3119861 07fbd8705cda4caec05b3b1371e3a2f1d70b613b	no	6
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29	Non Patent Literature	NewsRoom_Macys_Home_Theater_8-11-03_2pages.pdf	988752 f0675fdb36c6f85c3e951560d59c070c44ffef0b	no	2
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32	Non Patent Literature	Epson_Product_Support_Bulletin_4-30-03_30pages.pdf	11375351 c84dcd013a1fd485639aa5aaf0741354c4011ce6	no	30
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33	Non Patent Literature	EpsonNet_802-11b_Convenient_Printing_2002_2pages.pdf	435699 027659a9a45018556c541bafe284c7dd9a0489af	no	2
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34	Non Patent Literature	Epson_Stylus_C80WN_Setup_2001_67pages.pdf	20081941 8e18d601fc2c38def238edc362c83f9f1349fb03	no	67
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35	Non Patent Literature	Epson_Stylus_C80WN_Quick_Start_2002_2pages.pdf	1149839 20dbb9b2cb5899b2f3a04582c7cc73add107cc79	no	2
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36	Non Patent Literature	Epson_Users_Guide_2002_68pages.pdf	17322413 6fbf97640495d1086a17b4ee29444397c8e1f47c	no	68
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37	Non Patent Literature	Guttman_Autoconfiguration_for_IP_2001_6pages.pdf	4550722 87876b97b8636b03e3fb8adf7534e1ed7cd192c0	no	6
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38	Non Patent Literature	Hawn_First_Look_cd3o_c300_2004_2pages.pdf	495651 6888753a42ab8466727ca426bb7131c748288d1a	no	2
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39	Non Patent Literature	MediaLounge_DSM-320_manual_v1_59pages.pdf	8189161 750cd6491b4b1ea21309953caa5801d17e565fe6	no	59
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40	Non Patent Literature	NewsRoom_Miller_Adapted_for_flight_9-18-03_3pages_.pdf	2373736 e8a3107d248f9b1320d481dddd8ec2e4a2b0fdef	no	3
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41	Non Patent Literature	NewsRoom_Miller_Creating_Virtual_Jukeboxes_8-19-03_3pages.pdf	1717494 bf5bd8e273928454f3d2d47920644ebdf34e536b	no	3
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42	Non Patent Literature	NewsRoom_Sheehan_More_brains_9-1-03_3pages.pdf	1782515 997841e6e711ee22fe871d5aaec015d95b6755af	no	3
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43	Non Patent Literature	Moses_Home_Networking_Using_IEEE_2002_16pages.pdf	2927174 2a8ca7cb56d6a347a9b098e5b5900898d8c22d98	no	16
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44	Non Patent Literature	NewsRoom_Convergence_melds_computer_2-20-03_4pages.pdf	1484010 6fb09c05932e023ea4ed695bf3a17d01500f6df0	no	4
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45	Non Patent Literature	MusicCast_Interactive_Wireless_6pages.pdf	2068054 94f6676791173ad8d70ae5e45f28ba46f77c01a2	no	6
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Information:					
46	Non Patent Literature	MusicCast_quick_Manual_1999_7pages.pdf	3246408 cf0f7d41e6f5c1440cd23861bfaed2137cb74113	no	7
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47	Non Patent Literature	Frodigh_Wireless_ad_hoc_networking_2000_16pages.pdf	9327152 8f1019871713c8d5159914497203ddbebe2dce72	no	16
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48	Non Patent Literature	NewsRoom_Future_Shocks_12-4-03_3pages.pdf	1390674 895405b088c80cbd02863fcc646963da9edb2e45	no	3
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51	Non Patent Literature	NewsRoom_Goin_to_a_show-show_6-1-03_8pages.pdf	5241227 3297f2114c4befbe8edf2553c9c3242a47da03f8	no	8
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52	Non Patent Literature	NewsRoom_Net_Briefs_7-21-03_2pages.pdf	789731 6c7041dde56be4e4e77f72275a0325ff7e0af034	no	2
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53	Non Patent Literature	NewsRoom_Good_Guys_Unveils_12-3-2003_3pages.pdf	1739844 b94b54ef02565ab5ec87ced7ba4665fbbee30489	no	3
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54	Non Patent Literature	cd30_Mp3_Player_Quick_Installation_Guide_1page.pdf	841170 530f962c53b50b68d83080d7fa9a8ba1b0259e68	no	1
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55	Non Patent Literature	NewsRoom_Guide_to_Better_Giving_11-24-03_6pages.pdf	2843834 d858866c752ae64173b24ebb4ef4fd30d860d5a3	no	6
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56	Non Patent Literature	NewsRoom_c300_speakes_4-6-03_3pages.pdf	1545275 cf935b521a39f53af37d738cbf942d1fcdb5fe17	no	3
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57	Non Patent Literature	NewsRoom_Computer_Networks_Start_Entertaining_6-1-03_3pages.pdf	988527 98c8cf18bb0a5d7bfd62440cf428127977ae8238	no	3
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58	Non Patent Literature	NewsRoom_Holiday_Season_Brings_Gift_12-8-03_4pages.pdf	1812920 b11e97755f00c84180757c8e6f9f49784f04206b	no	4
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59	Non Patent Literature	Olenick_Networked_Palyer_Lineup_1-9-03_6pages.pdf	1654970 2d930b626753c97c0d11f99adaf1c0bf18bdfd8f	no	6
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Electronic Acknowledgement Receipt

EFS ID:	40104397
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:43:54
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	Valtchev_et_al_Service_Gateway_Architecture_2002_7pages.pdf	5322111 3fe0d4370e423fbfee86525273458b3b21834163	no	7

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2	Non Patent Literature	HomePod_Wireless_Network_Digital_Music_Player_User_Manual_2003_16pages.pdf	4113482 fc6683416f8677219a8f5f07e931be6f052f9d68	no	16
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3	Non Patent Literature	Creative_Sound_Blaster_Wireless_Users_Guide_V1_2003_61pages.pdf	13759497 0afa8266c0a394d29da9a4a4fd636810a108d94f	no	61
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4	Non Patent Literature	Urien_et_al_EAP-TLS_Smartcards_8-9-04_19pages.pdf	5859659 387bf70743b579aba916b828f5bfcf51c29cd4bb	no	19
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5	Non Patent Literature	NewsRoom_The_Next_Ace_1-14-02_3pages.pdf	1606350 0c865cb02c0c2a35c7c8bdafc5bc0e076c373e1b	no	3
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6	Non Patent Literature	UBIComp2002_Adjunct_Proceedings_2002_90pages.pdf	18257033 e0f3fc175438fbf470bac5f75f219101c984b2b6	no	90
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7	Non Patent Literature	Olenick_Networked_MP3_Player_Lineup_1-9-03_2pages.pdf	580296 e5f324b5d5e134fc02ca8c9ac41aaf3e3c8041c8	no	2
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9	Non Patent Literature	NewsRoom_Tunes_Pictures_from_Computer_12-27-03_2pages.pdf	710066 7ebdeb23d8b4ab1f7ab964b7530d43ea63ce514b	no	2
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10	Non Patent Literature	NewsRoom_Tunes_all_around_11-1-03_1pages.pdf	264789 df9e6f7286a054fc479ed4225d07a3e5c6fb8619	no	1
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12	Non Patent Literature	Tsai_et_al_SIM-based_Subscriber_Authentication_2003_6pages.pdf	3586958 2c824ef96c119b089b62f7dd50ed9d69bdb64554	no	6
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13	Non Patent Literature	NewsRoom_The_toys_of_summer_9-1-03_3pages.pdf	2219022 2360c82be171cb3dac7c0d41ec8267ae2382fd16	no	3
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14	Non Patent Literature	Trask_NewsRoom_Bluetooth_to_drive_wireless_speakers_6-1-03_2pages.pdf	496239 054909786100 4d609f7f91b0b252296bc353b2c0	no	2
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15	Non Patent Literature	NewsRoom_Transmitting_media_gets_easier_1-31-04_2pages.pdf	1388220 921c0bd20cecb6d1f2dcfa29711d52f5d9e740e8	no	2
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16	Non Patent Literature	NewsRoom_The_wide_world_of_Wi-Fi_5-1-04_7pages.pdf	6854856 261a26430663c2bd10b76bcbc948c3cc5d43ef34	no	7
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17	Non Patent Literature	Netgear_Users_Manual_for_the_MP101_Digital_Music_Player_V1_2_2004_48pages.pdf	14511913 7c0c530c5a0cc28fa01bc5f634cf4df013a558c2	no	48
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18	Non Patent Literature	NewsRoom_Ticker_8-1-03_2pages.pdf	930094 8e66e505f7314beb87c1c4de79cac9a5e3cddc5d	no	2
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22	Non Patent Literature	NewsRoom_IDG_Winners_6-2-04_3pages.pdf	2539267 d21ecdf50b9e4fb7f36fafa402ae23a518208e6c	no	3
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23	Non Patent Literature	Apple_WWDC_2003_Session_105-Rendezvous-YouTube.pdf	215005 977a629bb493782d80518649a7b1ab80fcf9b37a	no	3
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24	Non Patent Literature	Steve_Jobs_introduces_AirPort_YouTube_3pages.pdf	182098 3713d7e5aa56d0001c132d94aa25cb48eca52197	no	3
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25	Non Patent Literature	Zero_Configuration_networking-YouTube_3pages.pdf	195867 54093f1eafcc779eb5f72714365426913eb9e64e	no	3
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Information:					
26	Non Patent Literature	cd30_management_12-12-03_1page.pdf	549031 1c8f4599d45c16610dcf03321357fb12de2c3d42	no	1
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27	Non Patent Literature	Muheim_Clock_Synchronization_22-25_March_2003_12pages.pdf	4957571 07f5df48457e7c33e74b4808ada7d52250966107	no	12
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Information:					
		Total Files Size (in bytes):	97859491		

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New International Application Filed with the USPTO as a Receiving Office

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Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	1	Wired. Total Remote Control, Issue 11.06, June 2003, 2 pages.	
	2	Wireless USB Adapter 11g CPWUA054, CPWUA054|00, CPWUA054|37, User Manual, Version: 1.0, December 2003, 29 pages.	
	3	Yahoo Finance. BridgeCo Successfully Commercializes its BeBoB Application for the Music Industry: Four Manufacturers Demonstrate BeBoB-enabled Products at NAMM 2004. 16 January 2004, 3 pages.	
	4	Yamaha. Digital Audio Server, MCX-1000, Owner's Manual, 1996-2002, 148 pages.	
	5	Yamaha MusicCAST Digital Audio Server MCX-1000 Owner's Manual, Copyright 1996-2002, 148 pages.	
	6	Yamaha, MusicCAST: Digital Audio Terminal MCX-A10, Owner's Manual. 4 June 2003, 76 pages.	
	7	Yamaha Personal Receiver RP-U200 Operation Manual ("Operation Manual"), Copyright 1992-1997, 57 pages.	
	8	Zero Configuration networking with Bonjour -YouTube available via https://www.youtube.com/watch?v=ZhtZJ6EsCXo 3 pages [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
	9	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 8 July 2004, 62 pages.	
	10	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 1 July 2004, 60 pages.	
	11	Zeroconf Working Group, Dynamic Configuration of IPv4 Link-Local Addresses, Internet-Draft, 7 June 2004, 62 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

	12	Zeroconf Working Group, Dynamic Configuration of Link-Local IPv4 Addresses, Internet-Draft, 16 February 2004, 60 pages.	
	13	Zeroconf Working Group, Dynamic Configuration of Link-Local IPv4 Addresses, Internet-Draft, 31 March 2004, 60 pages.	

If you wish to add additional non-patent literature document citation information please click the Add button Add

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

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The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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Electronic Patent Application Fee Transmittal

Application Number:	16670109
Filing Date:	31-Oct-2019
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Filer:	Zuha Irfan/Jaden Knosher
Attorney Docket Number:	11-0401-CON1019A /15-1432

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
SUBMISSION- INFORMATION DISCLOSURE STMT	1806	1	240	240
		Total in USD ($)		**240**

Electronic Acknowledgement Receipt	
EFS ID:	40104217
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:39:12
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$240
RAM confirmation Number	E20207QE39505161
Deposit Account	506632
Authorized User	Zuha Irfan
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37 CFR 1.19 (Document supply fees)

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37 CFR 1.21 (Miscellaneous fees and charges)

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1	Transmittal Letter	IDS_Transmittal.pdf	70252 a76087755d35f666d71d70e6bb6fb86d26dc003f	no	1
Warnings:					
Information:					
2	Foreign Reference	WO03096741A2.pdf	3570720 41d6921e337efcbda467f32b44bc4a6a16a1797a	no	50
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Information:					
3	Foreign Reference	WO2008046530A2_EFS.pdf	2637558 e5c25b7ff211594703a345ef197e12509344a460	no	65
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4	Foreign Reference	KR20030011128A_EFS.pdf	406674 10330b1152ae170b9d6d8eb59a6b46d83d3c9191	no	12
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5	Non Patent Literature	Dhir_Xilinx_2001.pdf	1565561 3600877868eea46b53b302409b1384ce148fb1c1	no	18
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6	Non Patent Literature	14516883_FAI_04-0401-CON1014C_8-30-17_5pages.pdf	147293 1e2ec8f2732f3881d9fdb7a90f970a2cd9dec2a2	no	5
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7	Non Patent Literature	2017211958_JP_OA_11-0401-JP-DIV3_6-2-20_9pages.pdf	2981248 fbdfaf48cbe4fda3a57998210a1f1ed5e42e291f	no	9
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8	Non Patent Literature	Muheim_Clock_Synchronization_22-25_March_2003_12pages.pdf	4957571 07f5df48457e7c33e74b4808ada7d52250966107	no	12
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11	Non Patent Literature	Logitech_Slimserver_v2_3_5-19-02_2pages.pdf	69372 22d7488368de0d73526cbd7a0b6a308a232d5a87	no	2
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21	Non Patent Literature	2017211958_JP_Translation_of_OA_11-0401-JP-DIV3_6-2-20_6pages.pdf	2812748 1140137535fe88216e8a07eee0583c5966ec3ffc	no	6
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22	Non Patent Literature	Acoustic_Research_900MHz_Wireless_Speakers_AW871_12pages.pdf	4556697 9f1ca847c6280bb4d1960ca72267b8d0db451178	no	12
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37	Non Patent Literature	Rocketfish_RF-RBWS02_2009_33pages.pdf	11857029 bbed46657f41ceff38d5a6691f4f73c295562b03	no	33
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42	Non Patent Literature	NewsRoom_Sears_reveals_plans_10-26-2000_3pages.pdf	1541784 cde80c4e3ef6a795845a47c55cf8b44e1297ed08	no	3
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51	Non Patent Literature	NewsRoom_Yamaha_Mysiccast_12-1-03_2pages.pdf	682055 83365fadf181a78066b7bd8bf085497b9b4 da2f6	no	2
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52	Non Patent Literature	NewsRoom_Yamaha_annouces_8-11-03_2pages.pdf	746076 514a07f599526bb91a6f532d05727e41116 1ca0d	no	2
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53	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20200723172227.pdf	1057639 ee3b447853c3938a38b01f02581fc97b13d 40ce6	no	15
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54	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_1_IDS_20200723172227.pdf	1054964 58903d51df79f614ab32c7d283350edfc799 fa2e	no	8
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61	Fee Worksheet (SB06)	fee-info.pdf	30710 0fef33f1915165d089f8fcb82ee8d8195daddd0aa	no	2
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
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Filed: October 31, 2019	)	
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For: Playback Device Pairing	)	

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TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: July 23, 2020

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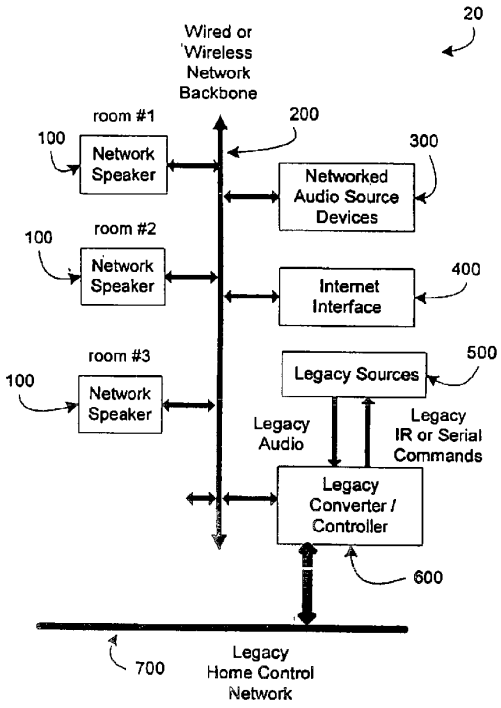
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(54) Title: AUDIO NETWORK DISTRIBUTION SYSTEM



(57) Abstract: An audio distribution network system (20) allowing an audio distribution system to be created that is integrated with the home automation system into a home network that permits vocal feedback, status and even control with the audio through network speakers (100).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

AUDIO NETWORK DISTRIBUTION SYSTEM

BACKGROUND OF THE INVENTION

Currently, most audio speakers are passive devices that receive an analog or digital audio signal. A few advanced models have limited self-diagnostics that can be communicated out over additional wire runs as well. These speakers are usually wired to racks or source switching pre-amps and amplifiers. The problem with this approach is that these systems are not very flexible. It is hard to expand the audio sources that can be heard through the speakers embedded in walls or other places after the system has been installed without buying and installing additional costly components. Other audio sources include as home control system voice communication, intercom audio, soundtracks for CD-ROM games, solid-state sound memories. Digital audio broadcasting systems, and even Internet audio can not easily be added and routed through to the existing speakers at a future date if the existing system was not originally designed to input and handle it. This is mostly due to the ongoing proliferation of new audio compression formats. High-quality digital audio data takes a lot of hard disk space to store (or channel bandwidth to transmit). Because of this many companies have worked on compressing and or coding of the bit stream to allow for a smaller binary footprint. This allows for high quality music to take up less storage space and to be transported across vast networks with a smaller amount of data, and therefore less bandwidth. However, these new compression and encoding formats require that un-compression and decoding be performed to reconstitute the original

audio before it is played out the loudspeaker. If an existing audio system is limited to reconstituting only audio formats known at the time of installation, the audio system quickly becomes obsolete.

Many new products have wireless network capabilities, but still cannot be easily connected into a home network, because of a lack of easily accessible wireless to wired network bridging within range of the device. This can especially be a problem if the wireless device is a handheld mobile unit such as a PDA, and due to a lack of access points, can not communicate from all rooms in the house.

The current approach to controlling audio and doing home automation is often cumbersome. The sound system remote that allows the room audio level to be adjusted does not allow the room lights to be dimmed. Therefore, different remote controllers for each function are needed. Nor do users like the "wall clutter" created by putting separate multiple audio and other home network control units in the walls. Wireless solutions to this problem such as Radio Frequency, known as RF, or Infra-Red, called IR, have limitations. The biggest limitation for RF is that in many large cites, the RF noise background is very high, creating communication problems, and there may be health concerns with excessive RF. The IR limitation is that IR is effective in "line of sight" only, and the home automation devices to be controlled may be in other rooms. These problems are compounded in retrofit situations where the

minimal changes that affect the current building and existing systems are desired.

It is therefore the object of this invention to provide a networked speaker, so that an audio distribution system can be created that is integrated with the home automation system into a home network that permits vocal feedback, status, and even control with the audio through the network speakers. The network should let the user know what is happening, and provide very intuitive instruction on how to use the system. This will enable the audio speakers to easily adjust to and allow new audio sources and to become wireless access points in the home, or provide the wireless bridge to the hard-wired network.

DESCRIPTION OF THE DRAWINGS

These and other objects and features of the invention will become more apparent upon a perusal of the following description taken in conjunction with the accompanying drawings wherein:

Figure 1 is a circuit diagram of an audio distribution system;

Figure 2 is a circuit diagram of a network speaker embodiment of the system shown in Figure 1;

Figure 3 is a circuit diagram of another network speaker embodiment;

Figure 4 is a circuit diagram of another network speaker embodiment;

Figure 5 is a circuit diagram of another network speaker embodiment;

Figure 6 is a circuit diagram of another network speaker embodiment; and

Figure 7 is a circuit diagram of a CODEC circuit for use in the network speaker embodiments of Figures 2 – 6;

Figure 8 is a circuit diagram of a Legacy Audio Converter/Controller for use in the system shown in Figure 1;

Figure 9 is a circuit diagram of a network speaker including power options; and

Figure 10 is a network speaker including battery powered options and an energy storage module.

DETAILED DESCRIPTION OF THE PREFERED EMBODIMENT

An audio distribution network system 20 (Figure 1) includes a plurality of speaker node units 100 which are coupled to a Transport Control Protocol/Internet Protocol (TCP/IP) based network backbone 200. Also coupled to the network backbone 200 are networked audio source node devices 300, an Internet service interface 400, and a Legacy converter/controller 600. Legacy sources 500 provide analog or digital linear PCM (Pulse Coded Modulation) audio to be converted into a packet switched digital coding for transport across the network. They will also provide analog video which will be used for control status feedback, as well as conversion to a packet switched digital coding for transport across the network. In addition, the Legacy sources 500 will also receive IR or serial commands from the

converter/controller 600 which also communicates with a Legacy home control network 700. Some legacy sources 500 may also provide serial communications to the converter/controller 600.

The source devices 300 can consist of any number of networked digital audio source devices (music playback devices) such as personal computers or audio servers that are able to communicate with one another over the shared TCP/IP network 200 and have the resources to serve digital audio files (WMA, MP3, Corona, etc.) to the network. Bit streamed audio (digital music, in the form of binary data that is sent in packets) from the Internet also may enter the system 20 from the Internet interface 400. The Legacy audio devices 500 (existing analog audio equipment, i.e. CD players, tape decks, VCR's) have their audio converted into a packet switched digital network format (WMA, MP3, Corona) by the Legacy Converter 600 or by the network speakers 100. The network speaker 100 can also real time encode sound received from its internal microphone or from reversing the transduction circuit from the speaker to perform the act of capturing sound waves present in the room, and then coding that sound and providing it for use on the network 20, including by use of differential masking for control purposes. Any new device that is able to send audio out on the network can serve as the audio source for a network speaker 100 as long as the network speaker 100 understands the audio format. Control commands that affect the audio distribution can come from the network server 300, the Internet interface 400,

the legacy home control network 700 via the legacy converter/controller 500, or from other network speakers 100.

The system 20 is a collection of independent computers or other intelligent devices that communicate with one another over the shared TCP/IP network 200. For example, the system 20 can be part of the Internet linked networks that are worldwide in scope and facilitate data communication services such as remote login, file transfer, electronic mail, the World Wide Web and newsgroups, or for security reasons part of a home intranet network utilizing Internet-type tools, but available only within that home. The home intranet is usually connected to the Internet via an Internet interface 400. Intranets are often referred to as LANs (Local Area Networks).

The home network backbone 200 communicates using the TCP/IP network protocol consisting of standards that allow network members to communicate. A protocol defines how computers and other intelligent devices will identify one another on a network, the form that the data should take in transit, and how this information is processed once it reaches its final destination. Protocols also define procedures for handling lost or damaged transmissions or "packets". The TCP/IP network protocol is made up of layers of protocols, each building on the protocol layers below it. The basic layer is the physical layer protocol that defines how the data is physically sent through the physical communication medium, such as Thickwire, thin coax, unshielded twisted pair, fiber optic, telephone cable, fiber optic cable, RF, IR,

power line wires, etc. Those physical media requiring an actual physical connection of some type, such as Thickwire, thin coax, unshielded twisted pair, fiber optic, power line, telephone cable, or fiber optic cable, to the network device are called wired media. Those physical media not requiring an actual physical wire connection of any type to the network device, such as RF and IR, are called wireless media. A TCP/IP home network can be totally wired, totally wireless, or a mix of wireless and wired. A TCP/IP home network is not limited to a single physical communication medium. Different physical communication media can be connected together by bridging components to create a unified communication network. Each network physical media has its physical layer protocol that defines the form that the data should take in transit on that particular physical media. The bridging component enables the transfer and conversion of communication on one physical medium and its physical layer protocol to a different physical media and its physical layer protocol. Bridging components also may provide a proxy from one network to the other, this will be common among UpnP_V1 to V2, and with Ipv6 to Ipv4 (Internet Protocol version 6, 4). Common physical layer LAN technology in use today include Ethernet, Token Ring, Fast Ethernet, Fiber Distributed Data Interface (FDDI), Asynchronous Transfer Mode (ATM) and LocalTalk. Physical layer protocols that are very similar over slightly different physical media are sometimes referred to be the same name but of different type. An example are the three common types of Fast

Ethernet: 100 BASE-TX for use with level 5 UTP cable, 100BASE-FX for use with fiber-optic cable, and 100BASE-T4 which utilizes an extra two wires for use with level 3 UTP cable. The TCP/IP protocol layers are well known and will not be further described in greater detail.

The system 20 may have any number of networked self-sufficient digital audio source devices 300 in it, such as a digital music storage device, PC, music player, personal Digital Assistant (PDA), on board automobile music system, digital integrated audio equipment, personal digital recorder or video digital recorder. Networked audio source devices 300 can provide digital audio files such as WMA, MP3, "Corona", and MLP from its hard disk, internal flash, or an audio input such as a microphone or CD reader or music player. Also, the networked audio source devices 300 can encompass a specialized network server, usually a specialized, network-based hardware device designed to perform a single or specialized set of server functions. It is usually characterized by a minimal operating architecture, and client access that is independent of any operating system or proprietary protocol. Print servers, terminal servers, audio servers, control remote access servers and network time servers are examples of server devices which are specialized for particular functions. Often these types of servers have unique configuration attributes in hardware or software that help them to perform best in their particular arena. While specialized hardware devices are often used to perform these functions in large systems, the specialized functions served by

the network server could be performed by a more general use computer. A single computer, (sometimes referred to as a RISC (reduction instruction set computer), called a web server, could combine the functionality of the networked audio source devices 300 and the Internet interface 400. If no connection to the Internet is desired, the Internet interface 400 function can be removed from the system without loss of intranet network integrity. Network and web servers are well known and will not be described in greater detail.

The legacy home control network 700 is an existing network of devices in the home used to automate and control the home. If the legacy home control network 700 can not communicate over a shared TCP/IP network 200, it cannot directly control or be controlled by the network speakers, and the two dissimilar networks must be bridged by a Legacy Converter/Controller 600. Any legacy home control network 700 that can communicate within the system 20 over a shared TCP/IP network could be combined into the home network backbone 200 and then the legacy home control network 700 device would have access to and be able to control the network speaker 100 if it has the resources and instructions to do so. The Legacy Converter/Controller 600 can also be used to provide network access to un-networked legacy devices that are able to serve as command and control interfaces such as the telephone, cell phone, RF remote, IR remote, direct voice controller or keypad. A networked audio source 300 such as a PDA,

also can act as the legacy converter/controller for a legacy device such as an attached cell phone.

The legacy home audio sources 500 are other audio sources that are not able to communicate over a shared TCP/IP network 200, such as analog audio players, CD players, video game players, tape players, telephone, VCRs or other audio sources that are not able to communicate over a shared TCP/IP network 200. The legacy Converter/Controller 600 takes the analog or digital linear PCM_ audio from the Legacy home sources 500, converts it into an acceptable digital format or formats if needed, and serves the audio as needed over the shared TCP/IP home network backbone 200. If the legacy home audio source 500 provides an analog audio to the Legacy Converter/Controller 600, the Legacy Converter/Controller 600 must convert the analog audio into an appropriate digital audio format before serving it to the network. The Legacy Converter/Controller 600 can also convert commands sent from the home network 200 to the legacy home source 500 into a command format that is understood by the legacy home source 500, such as serial, RF or IR commands. A system may have multiple Legacy Converter/Controllers 600 for each legacy home source 500 or legacy home control network 700, or a Legacy Converter/Controller 600 may convert and control more than one legacy home source 500 or multiple Legacy home control networks 700.

Illustrated in Figure 2 is one network speaker embodiment 100A. A network interface 110 couples the network backbone 200 of the system 20

(Figure 1) to a network controller 120 which feeds a digital to analog converter (DAC) 122 via an audio format converter 121. Receiving an output from the DAC 122 is a pre-amplifier 123 which also receives inputs from speaker sensors 124. An amplifier 125 receives the output of the pre-amp 123 and feeds a speaker driver 126 coupled to speaker components 127.

The network speakers 100A may be enclosed in a case or box, in a ceiling embedded in or behind a wall, or in a car and constitute the most prevalent enabling components in the system 20. Each network speaker 100A communicates to the network backbone (Ethernet) 200 through the network interface 110 that handles the physical layer hardware protocol. The network interface 110 may connect to one or more physical layers, wired or unwired or both. From there the Network Speaker Controller 120 provides the intelligence to run the various application features of the network speaker, including the higher levels of the TCP/IP protocol. Audio sources (Digital Music content) received from the network and addressed to a particular network speaker 100A are sent to the audio format converter 121 that converts the source digital audio format into a form ready to be converted to analog. The correctly re-formatted digital signal is sent to the digital to DAC 122 to be converted from digital to analog. The analog signal then goes to a pre-amp 123 where the signal is adjusted and filtered. Included in the pre-amp 123 can be an active crossover which operates at preamp level to limit the frequencies to the amplifier or amplifiers connected to it. The speaker components

connected to these pre-amplifiers would therefore receive a limited frequency range, and can be optimized for the frequencies received. The pre-amp signal then goes to the amplifier section 125, and the amplified signal proceeds to the speaker driver 126 and out the speaker microphone components 127 to become audio sound waves. Because the application software in the Network Speaker controller 120 and audio format converter 121 can be updated over the network and with the use of sufficient processing power, and presence of ample memory, the network speaker 100A can be made to play currently unknown digital formats in the future. The audio format converter 121 may have the DAC 122 built in. The speaker sensors 124 which may include temperature, SPL, ambient and noise floor, pressure, and voltage sensors provide the on board application speaker feedback which enable internal auto adjustment to enhance speaker protection and performance and allow for sending control signals back to other devices which may need/want the status information. A very useful application for this would be for the use of differential masking. This is a process in which you are comparing samples from the digital source against the real time encoding samples from within the air space. The original digital source is then subtracted from the combined real time encoding and the result is a new sample.

The network interface 110 connects the network speaker 100A to the actual network backbone 200 and will vary depending on the physical media and physical layer protocol used. Network interface cards, commonly referred

to as NICs, are often used to connect PCs to a wired network, and are used in the preferred embodiment when the network backbone is some form of wired cable or fiber optics. The NIC provides a physical connection between the networking cable and the computer's internal bus. Different computers have different bus architectures; the most common are PCO found on 486/Pentium PCs and ISA expansion slots commonly found on 386 and older PCs. NICs come in three basic varieties: 8-bit, 16-bit, and 32-bit. The larger the number of bits that can be transferred to the NIC, the faster the NIC can transfer data to the network cable. Many NIC adapters comply with Plug-n-Play specifications. On these systems, NICs are automatically configured without user intervention, while on non-Plug-n-Play systems, configuration is done manually through a setup program and/or DIP switches. Cards are available to support almost all networking standards, including the latest Fast Ethernet environment. Fast Ethernet NICs are often 10/100 capable, and will automatically set to the appropriate speed. Full duplex networking is another option, where a dedicated connection to a switch allows a NIC to operate at twice the speed. NIC cards with multiple terminations capable of supporting multiple physical layer protocols or within protocol types are to be preferred. Within the NIC cards are transceivers used to connect nodes to the various Ethernet media. Most computers and network interface cards contain a built-in 10BASE-T or 10BASE2 transceiver, allowing them to be connected directly to Ethernet without requiring an external transceiver. Many Ethernet

devices provide an AUI connector to allow the user to connect to any media type via an external transceiver. The AUI connector consists of a 15-pin D-shell type connector, female on the computer side, male on the transceiver side. Thickwire (10BASE5) cables also use transceivers to allow connections. For Fast Ethernet networks, a new interface called the MII (Media Independent Interface) was developed to offer a flexible way to support 100 Mbps connections. The MII is a popular way to connect 100BASE-FX links to copper-based Fast Ethernet devices. Wireless backbone physical layer network connections are made using RF network receivers made by companies such as Linksys, Cisco, IBM, DLINK and others, using wireless protocols such as 802.11X, UWB (ultra_wideband), Bluetooth, and more as the network interface 101.

The network speaker controller 120 is an embedded controller with flash memory programmed to function as a web server. The network speaker controller 120 and the audio format converter 121 are enable to allow their application programming to be updated over the network, the network speaker can be made to play currently unknown digital formats in the future. The audio sources received from the network most likely will be in an encoded and/or compressed format. Digital audio coding or digital audio compression is the art of minimizing storage space (or channel bandwidth) requirements for audio data. Modem perceptual audio coding protocols, synonymously called digital audio compression techniques, like MPEG Layer-III or MPEG-2 AAC,

ATRACK3, WMA, Ogg Vorbis, or "Corona", and even a packet switched Dolby Digital (AC3 over Ipv6),exploit the properties of the human ear (the perception of sound) to achieve a respectable size reduction with little or no perceptible loss of quality. This compression is usually more than just reducing the sampling rate and the resolution of your samples. Basically, this is realized by perceptual coding techniques addressing the perception of sound waves by the human ear, which remove the redundant and irrelevant parts of the sound signal. The sensitivity of the human auditory systems for audio signals varies in the frequency domain being high for frequencies between 2.5 and 5 kHz and decreasing beyond and below that frequency band. The sensitivity is represented by the Threshold In Quiet so that any tone below the threshold will not be perceived. The most important psychoacoustics fact is the masking effect of spectral sound elements in an audio signal like tones and noise. For every tone in the audio signal a masking threshold can be calculated. If another tone lies below this masking threshold, it will be masked by the louder tone and remains inaudible, too. These inaudible elements of an audio signal are irrelevant for the human perception and thus can be eliminated by the encoder. The result after encoding and decoding is different from the original, but it will sound more or less the same to the human ear. How closely it would sound to the original depends on how much compression had been performed on it.

Audio compression really consists of two parts. The first part, called encoding, transforms the digital audio data that resides, say, in a WAVE file, into a highly compressed form called bitstream (or coded audio data). To play the bitstream on your soundcard, you need the second part, called decoding. Decoding takes the bitstream and reconstructs it to a WAVE file. Highest coding efficiency is achieved with algorithms exploiting signal redundancies and irrelevancies in the frequency domain based on a model of the human auditory system. Current coders use the same basic structure. The coding scheme can be described as "perceptual noise shaping" or "perceptual sub-band/transform coding". The encoder analyzes the spectral components of the audio signal by calculating a filterbank (transform) and applies a psychoacoustics model to estimate the just noticeable noise-level. In its quantization and coding stage, the encoder tries to allocate the available number of data bits in a way to meet both the bit rate and masking requirements. The decoder is much less complex. Its only task is to synthesize an audio signal out of the coded spectral components.

The term psychoacoustics describes the characteristics of the human auditory system on which modern audio coding technology is based providing audio quality of a coded and decoded audio signal the quality of the psychoacoustics model used by an audio encoder is of prime importance. Audio data decompression and de-coding of audio formats into the audio format acceptable the loudspeaker is performed by the audio format converter

121. This audio format conversion of different formats allows high quality low bit-rate applications, like soundtracks for CD-ROM game, solid-state sound memories, Internet audio, or digital audio broadcasting systems to all be played over the same speaker. The audio format converter 121 function in the current embodiment of the networked speaker will be performed by an audio coding and decoding chip set (CODEC). CODEC hardware and or software is currently available from such companies as Micronas, Sigmatel, TI, Cirrus, Motorola, Fraunhofer, and Microsoft. CODECs handle the many current encoding protocols such as WMA, MPEG-2 AAC, MP3(MPEG Layer III), MPSPro, G2, ATRACK3, MP3PRO, "Corona", (WMAPro)Ogg-Vorbis and others. To best perform the audio format conversion function, the CODEC should be designed to handle all types of audio content, from speech-only audio recorded with a low sampling rate to high-quality stereo music. The CODEC should be very resistant to degradation due to packet loss, and have an efficient encoding algorithms to perform fast encodes and decodes, and to minimize the size of the compressed audio files, and still produce quality sound when they are decoded. In addition, the CODEC should be highly scalable and provide high-quality mono or stereo audio content over a wide range of bandwidths, to allow selection of the best combination of bandwidth and sampling rate for the particular content being played or recorded. Content encoded at 192 Kbps by the CODEC should be virtually indistinguishable to a human ear from content originating on a compact disc. This extremely high-

quality content is called CD transparency. Shown in Figure 6 is a circuit diagram of a CODEC circuit that could be used to implement the audio format converter 121 function of the network speaker. A preferred embodiment of this invention uses the Windows Media Audio (WMA) Audio CODEC by Microsoft. The audio format converter 121 function could also be performed by a decoder chip with no encoder functionality if no digital audio reformatting or digital encoding of analog audio is desired.

The digital to analog converter 122, converts a digital input into an analog level output. At the pre-amp 123, the analog signal is adjusted and filtered, and any desired active or electronic crossover may be performed. An electric crossover is a powered electronic circuit which limits or divides frequencies. Most electronic crossovers have output controls for each individual channel. This allows you to set the gains for all amplifiers at one convenient location, as well as the ability to level match a system. Some crossovers will allow you to set the low and high pass filters separately, which allows you to tune out acoustic peaks or valleys at or near the crossover frequencies. One of the advantages of electronic crossovers is that there is little or no insertion loss. Passive crossovers reduce the amplifier power slightly, due to their resistance. Another advantage of electronic crossovers is the ability to separate low frequencies into their own exclusive amplifier, which reduces distortion heard at high volumes in the high frequency speakers. Amplification of low frequencies requires greater power than higher

frequencies. When an amplifier is at or near peak output, clipping may occur, which is able to destroy tweeters and other speakers with small voice coils. A separate low frequency amplifier allows the total system to play louder and with lower distortion. An adjustable crossover allows the user to make crossover changes easily and to immediately hear the effect of the changes. Changing the filters, or crossover points, lets users adjust the audio to meet their preferences. The electronic crossover, by limiting the frequencies to the amplifier or amplifiers connected to it, also ensures that the speakers which are connected to these amplifier(s) would therefore receive a limited frequency range, and these speakers can be optimized for the frequencies received. It also enables personal preferences in frequency range pre-amplification adjustment. The advantages of using active filters are that they are built onto the pre-amp circuit board. Changing the filters (or crossover points) is usually accomplished through external dial turning, by changing frequency modules with a switch or by changing crossovers if fixed types are used. An adjustable crossover is preferred.

The amplifier 125 is comprised of one or more amplifier circuits that amplify the audio signal to the desired final signal strength. Using multiple amplifiers takes advantage of the crossover frequency filtering to optimize the amplifier for the frequency range received. Amplifiers using the latest in digital amplifier technology that can efficiently produce large amounts of power with a much smaller heat sink than in past designs are preferable, and

this also will eliminate the need for another DAC. The speaker driver 126 is comprised of one or more speaker drivers circuits. Using multiple drivers for multiple speakers allows the speakers to be optimized for the frequency range received. The speaker components 127 convert the signal to sound and are voiced and designed to handle a wide dynamic range of audio frequencies and are able to aid in the accurate reproduction of sound from a digital source.

Figure 3 shows another network speaker embodiment 100B. The speaker embodiment 100B includes all of the components of the speaker embodiment 100A and identical components bear the same reference numerals. In addition, speaker embodiment includes an analog to digital converter (ADC)128 and a modified speaker/microphone driver 126b. The Speaker Driver 126b circuitry is expanded to serve as both an output driver and a microphone input for half duplex operation (one way conversations), and an internal microphone can implement a full duplex operation (simultaneous two way conversations). The microphone input is sent to the pre-amp 123 for signal adjustment and filtering. From there it is sent to the analog to digital converter 128 to convert the analog signal to a simple digital format. The audio format converter 121 then takes the digital microphone input and compresses and encodes it into a desired format for distribution. The encoded format of which may vary, depending on the application is sent to the network controller 120 where, depending on the software application and programming, its final destination and function are determined. The input

may be stored locally for future audio feedback, used locally, or it may be sent out to the network through the network interface 110. The input could be used with a voice recognition application to initiate spoken audio or home control commands. Speaker sensors 124 feedback received by the pre-amp 123 can also be sent to the ADC 128 to be converted from analog to digital format, and then passed on to the network controller 120. Depending on the network controller 120 applications, the feedback can then be sent out the network interface 110 onto the network backbone 200 as an alarm or other condition if desired. Additional features in the audio format converter 121 in conjunction with application software could enable the ability to change audio setting(s) based on the type of music that is being played, or even the user playing it, or Time of Day (TOD). The network speaker 100B may have the ability, through the audio format converter 121 or other circuitry, to support headphones.

Figure 4 depicts another network speaker embodiment 100C with wireless remote control access. All components of speaker embodiment 100B are present in speaker embodiment 100C and bear the same reference numerals. In addition, additional components provide wireless remote control from IR and RF remotes. It should be noted that the additional components could have been added to the network speaker embodiment 100A as well. An internal IR sensor 131 senses IR from one or more external IR remotes 170. The sensed IR is sent to an IR receiver 130 that processed the IR input, and the

processed IR input is sent to the network controller 120 which then performs commands as per its application software. If desired, the IR sensor 131 may be external of the speaker 100C which then can be installed behind a wall as wall speakers, and still receive IR. The network controller 120 can send the processed IR commands out the network interface 110 onto the network to be processed remotely by the Legacy Converter/Controller 600 which then translates them into commands to the legacy sources 500. Alternatively, the network controller 120 can send the processed IR commands out the network interface 110 onto the network to be processed remotely by the legacy Converter/Controller 60 which then translates them into Legacy home control network 700 commands. In the same manner, RF control access is provided by a RF Sensor/Transceiver 135 which receives input from RF remotes 175 and other network speaker transceivers, and transmits information to the network controller 120. While this embodiment 100C shows both IR and RF access through the same network speaker, it will be appreciated that IR only control access or RF only control access could be implemented.

The wireless control access allow IR or RF input to the speakers 100C to be used to remotely control the system 20 including control of the audio, (including multi destination sync), video, HVAC, security, room light level, house scenes, etc., if the system is so programmed. Where the software application includes the ability to "learn" new IR commands and associate them with audio or house control commands, existing legacy sources with IR

remotes can be integrated into the network controller through the legacy Converter/Controller 600. And because the legacy Converter/Controller 600 is upgradeable over the network, the network speaker IR input ability could be made to control currently unknown system devices in the future.

Figure 5 shows another network speaker embodiment 100D that serves as bridge between one or more wireless network devices and a wired segment of the network 200, known as a wireless access point. This wireless access point embodiment includes the components of embodiment 100B with additional components added for wireless-wired bridging, such as dual mode ad-hoc to infrastructure mode. The network 200 consists of at least one physically wired network section 240 and at least wireless network segment 250. The network interface 110 consists of two parts, a wired network interface 111 connecting the network speaker 100D to the wired network backbone 240 and an RF network interface 112 connecting the network speaker 100D to the wireless RF network backbone 250. Network communication can pass between the wired backbone 240 and the wireless RF network backbone 250 via the network speaker 100D. The RF network interface 112 consists of an RF receiver/transmitter capable of both receiving and sending RF network communication.

Figure 6 illustrates another speaker embodiment 100E that has wireless control access and that serves as a wireless access point. This wireless access

point embodiment includes all of the components of embodiments of 100B, 100C and 100D.

If a home has a network speaker type system, the application software opens all kinds of possibilities. New sources or new source content may enable these intelligent speakers 100 to have more features and playback formats that are not in existence today, and to adjust to the source content. An example of this would be the ability to change audio settings based on the type of music that is being played, or even the user playing it, or Time of Day (TOC). This will be highly customizable long past the time of installation, to keep the audio system upgradeable without structural changes to the home even if the network speakers are embedded in walls and other not easily accessed locations. In addition, a network speaker 100 with a microphone and the appropriate application software could record and route messages digitally to any house network node or internet node; locate and identify a user in a room, which in turn enables the system 20 to route voice mail and message to the room the user is presently in on demand; locate and identify a room user, which in turn enables the system to route voice mail and message to the room the user is presently in on demand; serve as a voice recognition and authorization point to enable direct voice control of any node on the network or any legacy audio source 500 or legacy control network 700 device that may be connected to the network 200 through a legacy converter/controller 600; or to automatically record and/or route voice messages from one user to the room

in which the recipient identified in the voice message is currently located. Multiple network speakers 100 with microphones in one room could even triangulate the location of the user, which in turn enables the system to optimize the audio for the users current location.

The network speaker 100 with a sufficient memory and the appropriate application software could store voice mail to be played on demand by the room user or in a totally wireless network 200 serve as a wireless repeater within a home if the wireless communication medium signal strength was insufficient to reach all rooms or areas of the home from all locations. Also, a strategically placed network speaker 100 serving as a wireless access point allows the communication of audio, data, commands or any other communications from mobile network nodes whenever they are within communication range, such as PDAs, mobile controllers, mobile computers, wireless headphones, or network speakers 100 in mobile units such as automobiles.

A network speaker 100 with IR or RF receivers and the appropriate application software would allow wireless remote control, status and feedback from any IR or RF remote, or other network speaker transceiver, to any node on the network or any legacy audio source 500 or legacy control network 700 device that may be connected to the network 200 through a legacy converter/controller 600. A network speaker 100 with a RF receiver capable of transmitting RF could enable wireless non-networked headphones. Also, a

network speaker 100 could encode and send and transmit sound and images from a room out on the network, as well as act as the source point for room control and automation and voice recognition services for control and automation. In addition, a network speaker 100 could participate in a multi speaker session during which each network speaker 100 could perform as a master or slave mode. A network speaker100 in the master mode would control and distribute multi session clocks and this is where they would originate and be calculated. The network speaker 100 in the slave mode would receive via TCP/IP and/or RF clocking information from the master in a multi session mode.

A network speaker 100 additionally could be an audio source locally within the room via internal solid-state memory as well as terrestrial analog reception (AM/FM/CATV) if components were added to receive and play back digital and analog terrestrial radio frequencies (AM/FM/CATV).

Figure 8 depicts a legacy Audio Converter/Controller 600 embodiment, which includes many similar components as the Network Speaker 100. The legacy Audio Converter/Controller 600 communicates with the network backbone (Ethernet) 200 through a network interface 610 which handles the physical layer hardware protocol and may connect to one or more physical layers, wired or unwired or both. Coupled to the network interface 610 is a Network Controller 620 which provides the intelligence to run various application features of the legacy Audio Converter/Controller 600, including

the higher levels of the TCP/IP protocol. The Network Controller 620 controls an audio format converter 621 which converts the legacy source audio into the desired network digital format for distribution. Digital audio from legacy sources 500 are transmitted directly to the audio format converter 621 to be re-formatted into the desired digital format. Analog audio from legacy sources 500 are fed to an analog to digital converter ("ADC") 622, and the resultant digitized signal then goes to the audio format converter 621 to be coded into the desired digital format. The Network Controller 620 takes the properly formatted digital audio and sends it to the network 200 via the network interface 610. Also, the audio format converter 621 may consist of multiple encoders to provide multiple conversions of different legacy audio inputs simultaneously. The Legacy_Converter/Controller 600 uses the analog video from the legacy source device for encoding to a packet switched digital format such as WMAPro "Corona", and also uses the analog video inputs for power status and feedback.

The network interface 610 may vary depending on the physical medium and physical layer protocol used. Network interface cards, commonly referred to as NICs, are often used to connect a PC to a wired network, and are used in the preferred embodiment when the network backbone is some form of wired cable or fiber optics. Such a NIC provides a physical connection between the networking cable and the computer's internal bus. Different computers have different bus architectures; the most common are PCI found

on 486/Pentium PCs and ISA expansion slots commonly found on 386 and older PCs. Typically NICs come in three basic varieties: 8-bit, 16-bit, and 32-bit. The larger the number of bits that can be transferred to the NIC, the faster the NIC can transfer data to the network cable. Many NIC adapters comply with Plug-n-Play specifications. On these systems, NICs are automatically configured without user intervention, while on non-Plug-n-Play systems, configuration is done manually through a setup program and/or DIP switches. Cards are available to support almost all networking standards, including the latest Fast Ethernet environment. Fast Ethernet NICs are often 10/100 capable, and will automatically set to the appropriate speed. Full duplex networking is another option, where a dedicated connection to a switch allows a NIC to operate at twice the speed. NIC cards with multiple terminations capable of supporting multiple physical layer protocols or within protocol types are preferred so that the NIC cards include transceivers used to connect nodes to the various Ethernet media. Most computers and network interface cards contain a built-in 10BASE-T or 10BASE2 transceiver, allowing them to be connected directly to Ethernet without requiring an external transceiver. Many Ethernet devices provide an AUI connector to allow the user to connect to any media type via an external transceiver. The AUI connector consists of a 15-pin D-shell type connector, female on the computer side, male on the transceiver side. Thickwire (10 BASE5) cables also use transceivers to allow connections. For Fast Ethernet networks, a new interface called the MII

(Media Independent Interface) was developed to offer a flexible way to support 100 Mbps connections. The MII is a popular way to connect 100BASE-FX links to copper-based Fast Ethernet devices. Wireless backbone physical layer network connections are made using RF network receivers made by companies such as Linksys, Cicso, IBM, DLINK, and others, using wireless protocols such as 802.11X, UWB, Bluetooth, and more as the network interface 610.

The network speaker controller 620 is an embedded controller with flash memory programmed to function as a web server and enabled with the audio format converter 621 to allow their application programming to be updated over the network, the legacy Audio Converter/Controller 600 can be made to code audio to currently unknown digital formats in the future. As in the speaker embodiments described above, the desired audio to be distributed will likely be in a coded and/or compressed format. Digital audio coding or digital audio compression is the art of minimizing storage space (or channel bandwidth) requirements for audio data. Modern perceptual audio coding protocols, synonymously called digital audio compression techniques, like MPEG Layer-III or MPEG-2 AAC, ATRACK3, G2, WMA, Ogg Vorbis, or WMAPro, "Corona", exploit the properties of the human ear (the perception of sound) to achieve a respectable size reduction with little or no perceptible loss of quality. As described above, this compression, in addition to reducing the sampling rate and the resolution of the audio samples employees

perceptual coding techniques addressing the perception of sound waves by the human ear, that remove the redundant and irrelevant parts of the sound signal. The sensitivity of the human auditory systems for audio signals varies in the frequency domain being high for frequencies between 2.5 and 5 kHz and decreasing beyond and below this frequency band. The sensitivity is represented by the Threshold In Quiet. Any tone below this threshold will not be perceived. The most important psychoacoustics fact is the masking effect of spectral sound elements in an audio signal like tones and noise. For every tone in the audio signal a masking threshold can be calculated. If another tone lies below this masking threshold, it will be masked by the louder tone and remains inaudible too. These inaudible elements of an audio signal are irrelevant for the human perception and thus can be eliminated by the coder. The sound resulting after coding and decoding is different, but will be perceived more or less the same by the human ear. How closely it would sound to the original depends on how much compression had been performed.

Audio compression actually consists of two parts. The first part, called coding or encoding, transforms the digital audio data that resides, say, in a WAVE file, into a highly compressed form called bitstream (or coded audio data). To play the bitstream on your soundcard, you need the second part, called decoding. Decoding takes the bitstream and reconstructs it to a WAVE file. Highest coding efficiency is achieved with algorithms exploiting signal redundancies and irrelevancies in the frequency domain based on a model of

the human auditory system. Current coders use the same basic structure to produce coding that can be described as "perceptual noise shaping" or "perceptual sub-band/transform coding". The encoder analyzes the spectral components of the audio signal by calculating a filterbank (transform) and applies a psychoacoustics model to estimate the just noticeable noise-level. In its quantization and coding stage, the encoder tries to allocate the available number of data bits in a way to meet both the bit rate and masking requirements. The decoder is much less complex. Its only task is to synthesize an audio signal out of the coded spectral components. Psychoacoustics describes the characteristics of the human auditory system on which modern audio coding technology is based. For the audio quality of a coded and decoded audio signal the quality of the psychoacoustics model used by an audio encoder is of prime importance.

The audio format converter 621 performs audio data compression and encoding of audio formats into the audio format acceptable for distribution to the end receiver on the network and can consist of an audio encoder-decoder chip (CODEC). To best perform the audio format conversion function, the CODEC should be designed to handle all types of audio content, from speech-only audio recorded with a low sampling rate to high-quality stereo music. The CODEC should be very resistant to degradation due to packet loss, and have efficient encoding algorithms to perform fast encodes and decodes, and to minimize the size of the compressed audio files, and still produce quality

sound when they are decoded. Also, the CODEC should be highly scalable and provide high-quality mono or stereo audio content over a wide range of bandwidths, to allow selection of the best combination of bandwidth and sampling rate for the particular content being played or recorded. Content encoded at 192 Kbps by the CODEC should be virtually indistinguishable to a human ear from content originating on a compact disc. This extremely high-quality content is called CD transparency.

The analog to digital converter 622, commonly referred to as an ADC, converts an analog level input to a digital output. Adding a microphone speaker input to the ADC will enable voice control of the legacy Audio Converter/Controller 600. It would also enable the legacy Audio Converter/Controller 600 to record audio input for later use as system messages or audio feedback. Depending on the software application and programming in the network controller 620, the audio input may be stored locally for future audio feedback, used locally, or it may be fed out to the network through the network interface 610. The audio input could be used with a voice recognition application to initiate spoken audio or home control commands.

The Legacy Audio Converter/Controller 600 may also communicate with the legacy sources 500 using a legacy communication method, such as IR or serial commands, that are understood by the legacy device. The planned embodiment of the invention will use the fixed set of serial commands already

understood by the target legacy source. The network controller 620 controls and communicates with a legacy controller 624, which also communicates with the legacy source 500 through a legacy audio network interface 623. In a preferred embodiment of the invention, a RS-232 serial command interface will be used. The functions of the network controller 620 and the legacy controller can be combined into one embedded controller.

The Legacy Audio converter/Controller 600 may also communicate with the legacy home control network 700 using the network communication method understood and practiced by the legacy home control network 700 and such communication may vary greatly depending on the legacy home control network 700 being used. A preferred embodiment of the invention will use the CEBus powerline protocol for its communication method. The legacy controller 624 controls and communicates via a legacy home control network interface 625, with a legacy home control network 700. The functions of the legacy controller in controlling the legacy sources 500 and the legacy home control network 700 and the legacy controller could be separated out into two separate embedded controllers, or combined with the network controller 620. If no legacy source 500 is available, the legacy audio network interface 623 and the legacy source control function of the legacy controller 624 may be eliminated. Similarly, in the absence of a legacy home control network 700, the legacy home control network interface 625 and the legacy home network control function of the legacy controller 624 may be eliminated.

As illustrated in Figure 9 network speaker 100F can receive DC current from external regulated power supplys over existing 14-18 AWG speaker wire or can employ PoE (Power over Ethernet) technology to trickle charge the battery. Also, charge status can be provided for the battery 800.

Network speaker 100F has power applied as DC current from a rechargeable battery source 800 either located within the speaker or inserted into the speaker as a removable battery pack. This would also allow for line power status, which would perform a function specific to the application once this condition occurs.

Figure 10 depicts another speaker embodiment 100G which also can be battery powered. In addition, the speaker 100G includes an ESM (Energy Storage Module) which improves audio performance.

Obviously, many modifications and variations of the present invention are possible in light of the above teachings. It is to be understood, therefore, that the invention can be practiced otherwise than as specifically described.

1. A networked audio system comprising:

a plurality of speaker nodes;

a plurality of self-sufficient audio source node devices connected to said speaker nodes via a network;

service interface means connected to said speaker nodes via said network;

one or more legacy sources connected to said speaker nodes via said network; and

control and converter means connected between said one or more legacy sources and said speaker nodes.

2. A networked audio system according to claim 1 wherein said control and converter means comprises control and encoding nodes.

3. A networked audio system according to claim 1 wherein each said speaker node renders audio media content and distributes, controls, and serves media content connected to said speaker nodes via said network.

4. A networked audio system according to claim l, wherein each said speaker node comprises a microphone and signal processor means.

5. A networked audio system according to claim 4 wherein said processor means comprises a digital signal processor.

6. The audio system according to claim 5 wherein said digital signal processor comprises a real time adaptive analyzer.

7. A networked audio system according to claim 4 wherein said processor means comprises a speaker controller for providing intelligence to operate application protocol.

8. A networked audio system according to claim 7 wherein said processor means further comprises a format converter for converting a digital audio format input into an analog output.

9. A networked audio system according to claim 8 wherein said processor means further includes an amplifier and a pre-amplifier with an active crossover for limiting frequency output to said amplifier.

10. A networked audio system according to claim 8 wherein said speaker controller and format converter can be updated over said network with increased processing power and/or memory to accommodate future digital formats.

11. A networked audio system according to claim 5 wherein said processor means of each speaker comprises speaker sensor means providing information feedback to other said speakers.

12. A networked audio system according to claim 8 wherein said speaker controller is an embedded controller with flash memory programmed to function as a web server and together with said format converter are enabled to allow their application programming to be updated over said network and to thereby accommodate future digital formats.

13. A networked audio system according to claim 1 wherein said network comprises a wired section and one or more wireless segments, and

one or more of said speaker nodes comprises interface means providing a communication bridge between said wire section and said one or more wireless segments.

14. A networked audio system according to claim 13 wherein said interface means comprises an RF receiver/transmitter capable of both receiving and sending RF network communication.

15. A networked audio system according to claim 1 wherein said speaker nodes are adapted to participate in multi speaker sessions to establish a master speaker node and slave speaker nodes which would receive clocking control information from said master speaker node.

16. A networked audio system according to claim 1 wherein said control and converter means is adapted to convert analog signals from said legacy sources into a desired digital format for distribution to all of said speaker nodes.

17. A networked audio system according to claim 1 wherein said control and converter means is adapted to convert digital signals from said legacy sources into a desired re-formatted digital format for distribution to all of said speaker nodes.

18. A networked audio system according to claim 17 wherein said control and converter means is further adapted to convert analog signals from said legacy source into said desired digital format for distribution to all of said speaker nodes.

19. A networked audio system according to claim 18 wherein control and converter means comprises multiple encoders to provide simultaneous conversion of signals from said legacy sources into said desired digital format.

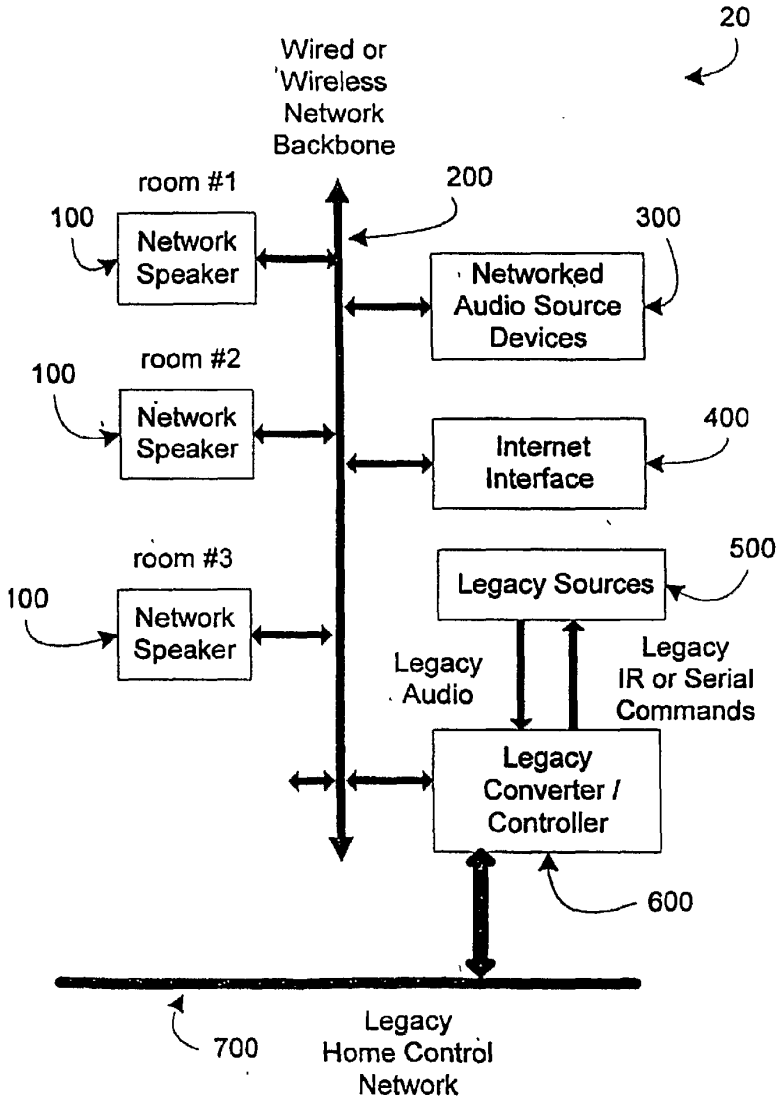

20
Wired or
Wireless
Network
Backbone
room #1
100
Network
Speaker
200
300
Networked
Audio Source
Devices
room #2
100
Network
Speaker
400
Internet
Interface
room #3
100
Network
Speaker
500
Legacy Sources
Legacy
Audio
Legacy
IR or Serial
Commands
Legacy
Converter /
Controller
600
700
Legacy
Home Control
Network

Figure 1.

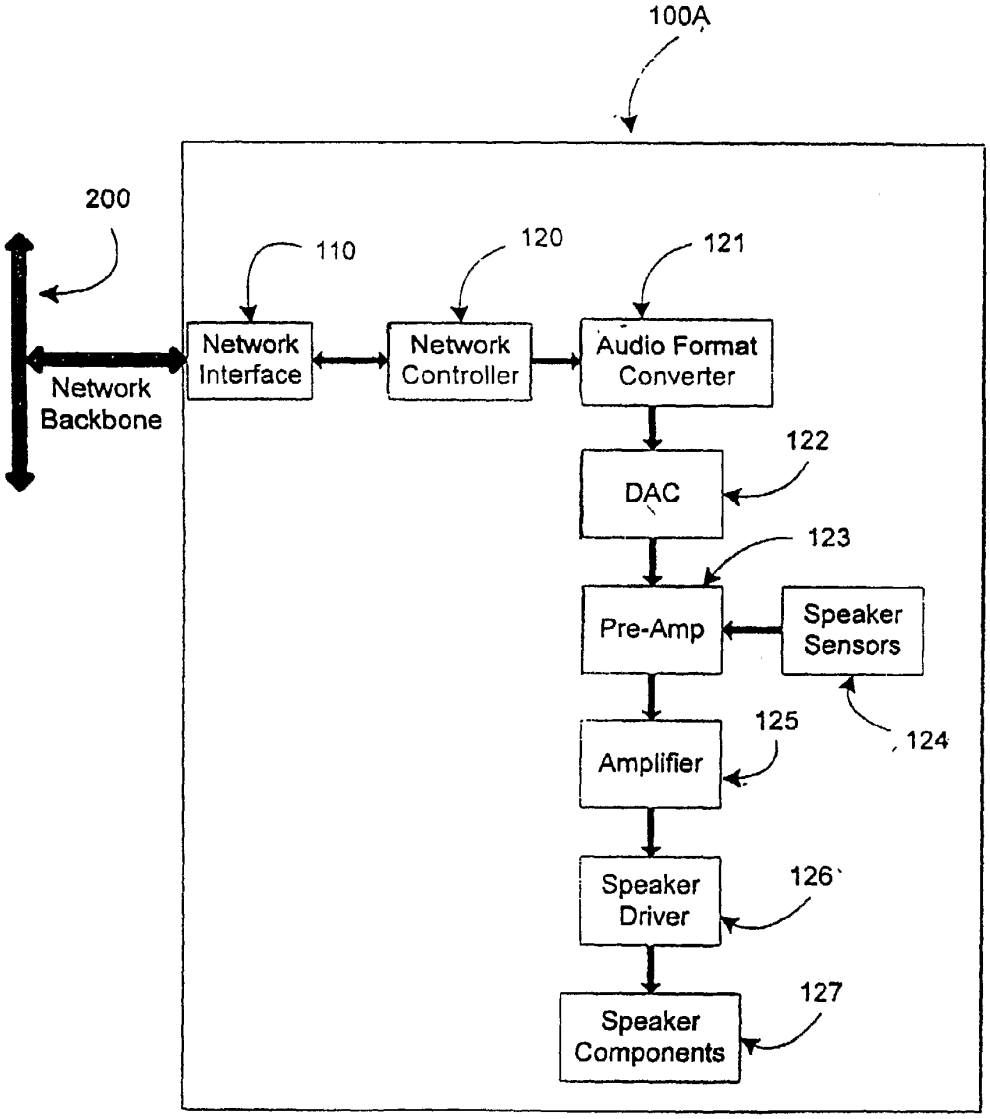


Figure 2.

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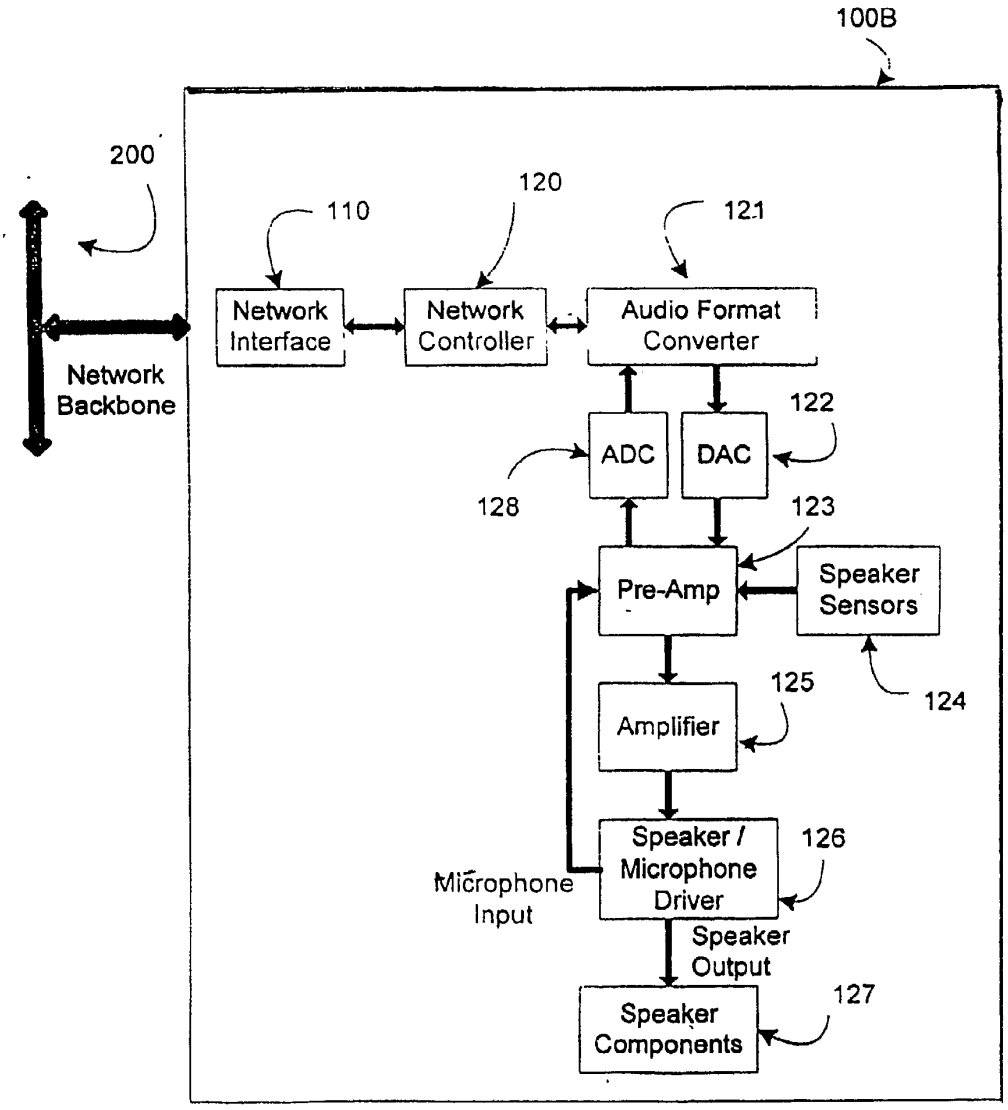

100B
200
110
120
121
Network Interface
Network Controller
Audio Format Converter
Network Backbone
122
ADC
DAC
128
123
Pre-Amp
Speaker Sensors
124
125
Amplifier
126
Speaker / Microphone Driver
Microphone Input
Speaker Output
127
Speaker Components

Figure 3.

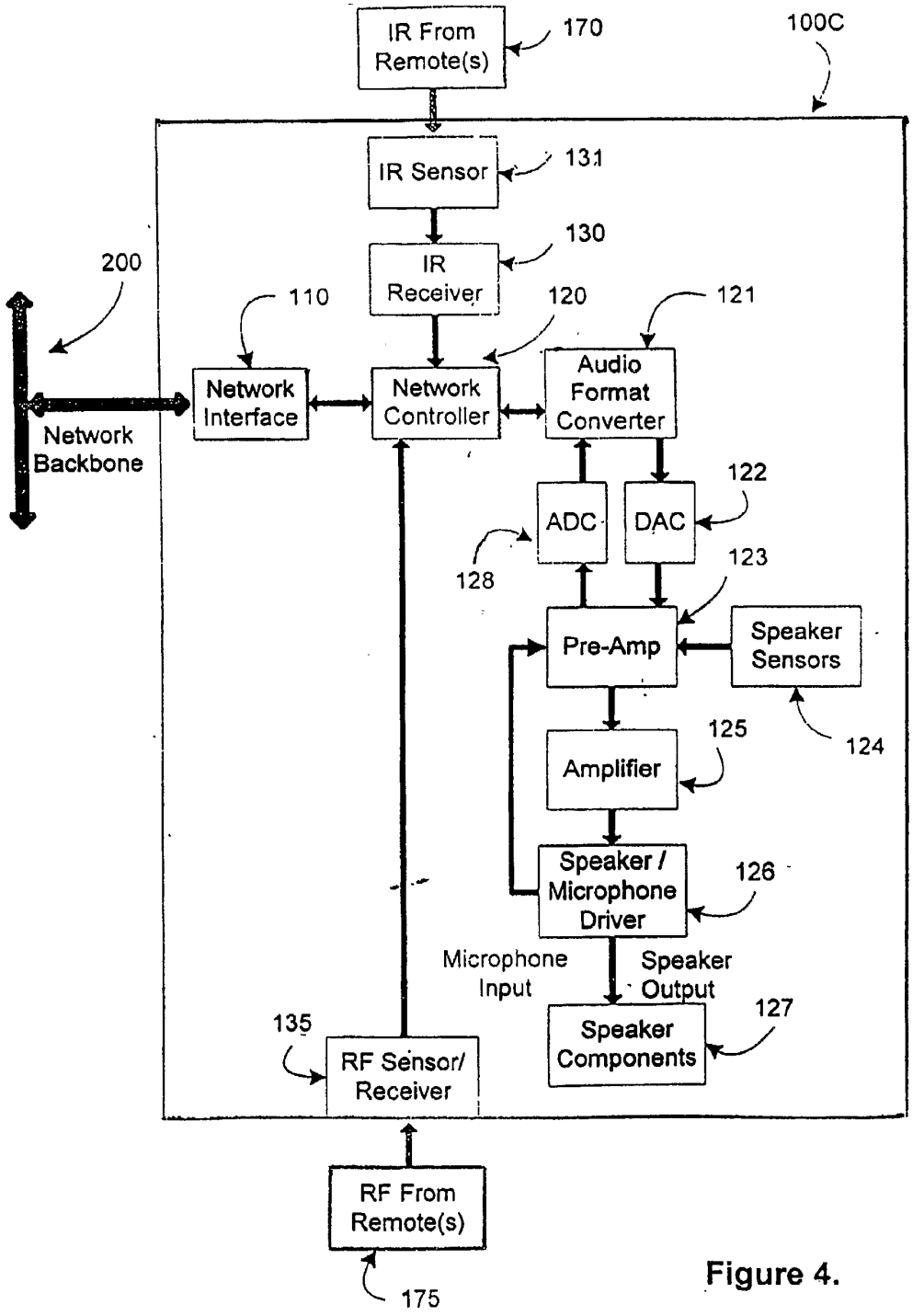


Figure 4.

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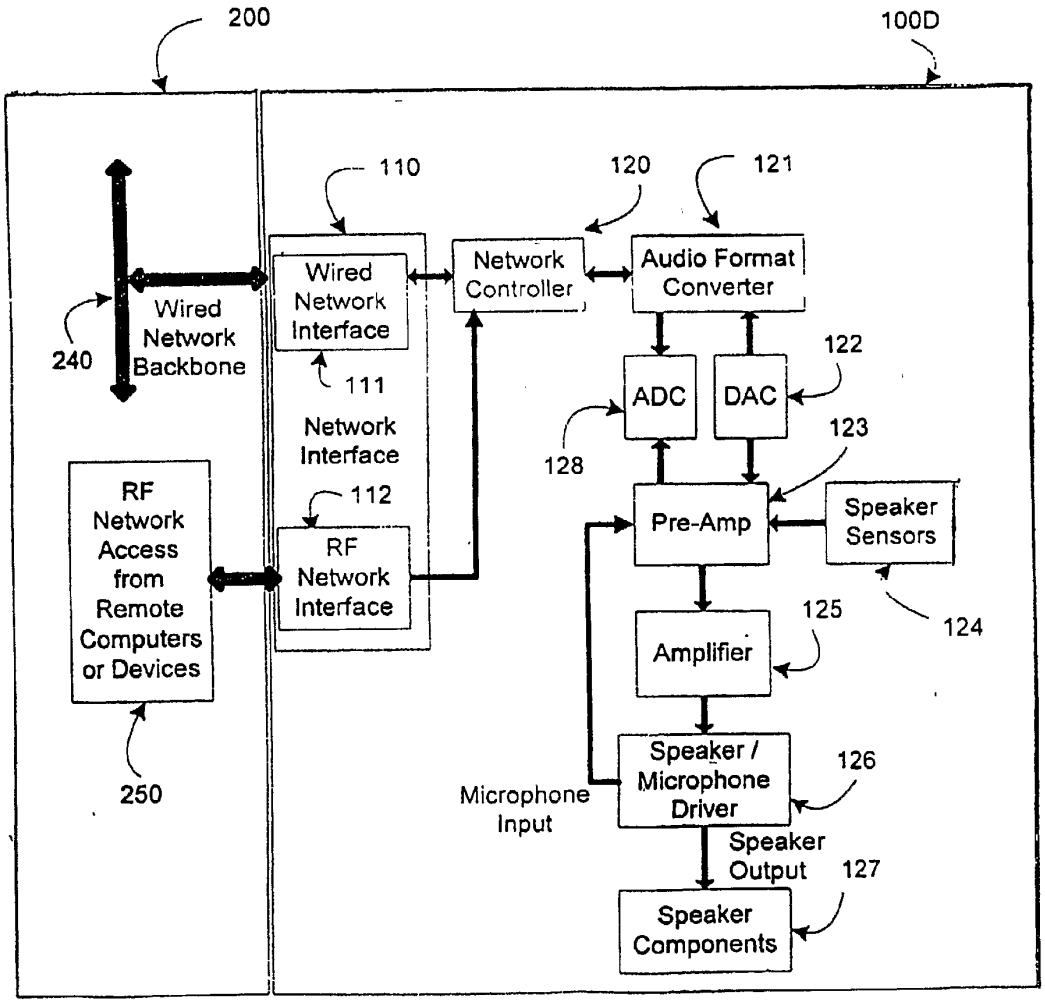


Figure 5.

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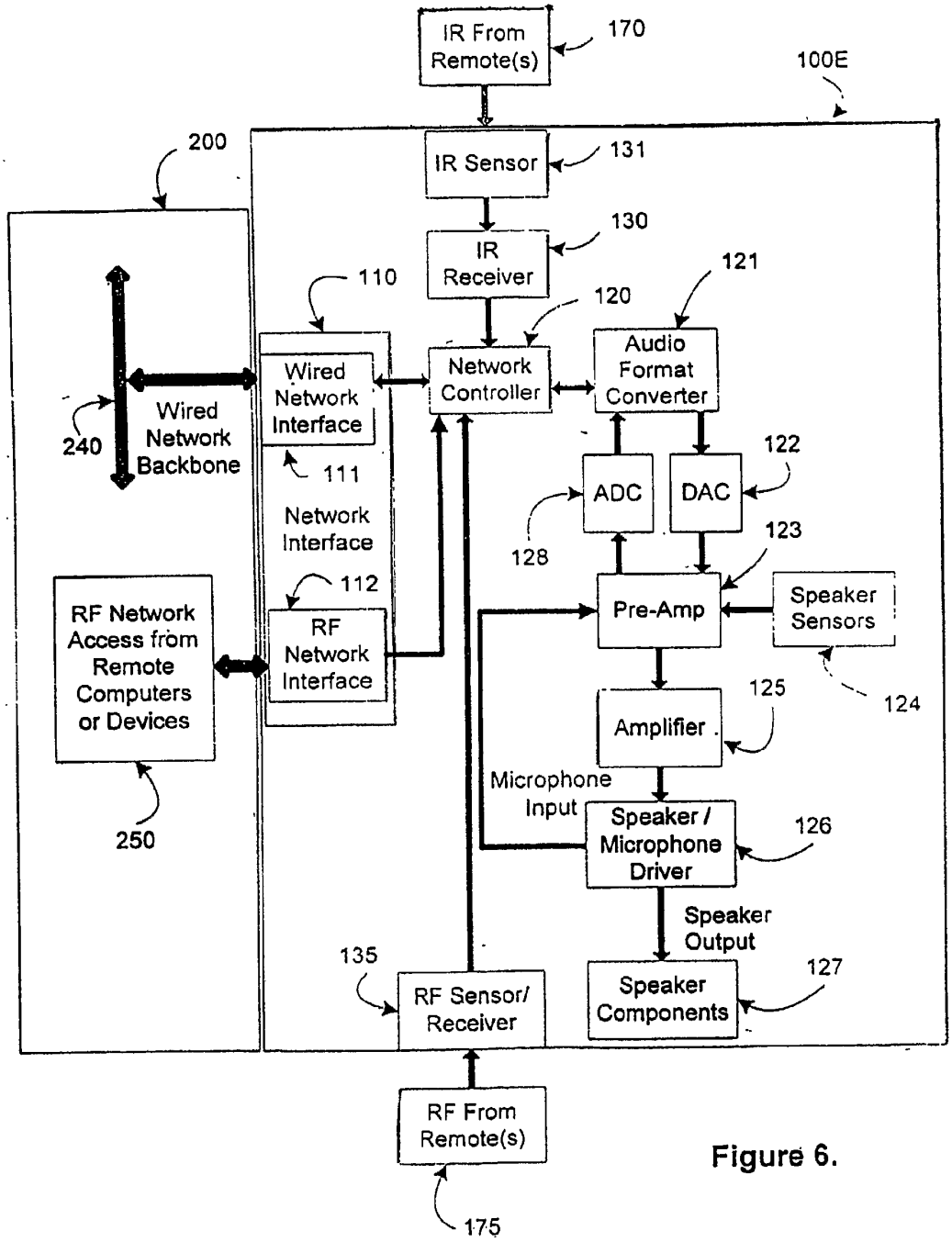

IR From Remote(s)
170
100E
200
IR Sensor
131
IR Receiver
130
110
120
121
Wired Network Interface
Network Controller
Audio Format Converter
240
Wired Network Backbone
111
Network Interface
122
ADC
DAC
128
123
112
RF Network Access from Remote Computers or Devices
RF Network Interface
Pre-Amp
Speaker Sensors
124
125
Amplifier
Microphone Input
Speaker / Microphone Driver
126
250
Speaker Output
135
RF Sensor/ Receiver
Speaker Components
127
RF From Remote(s)
175

Figure 6.

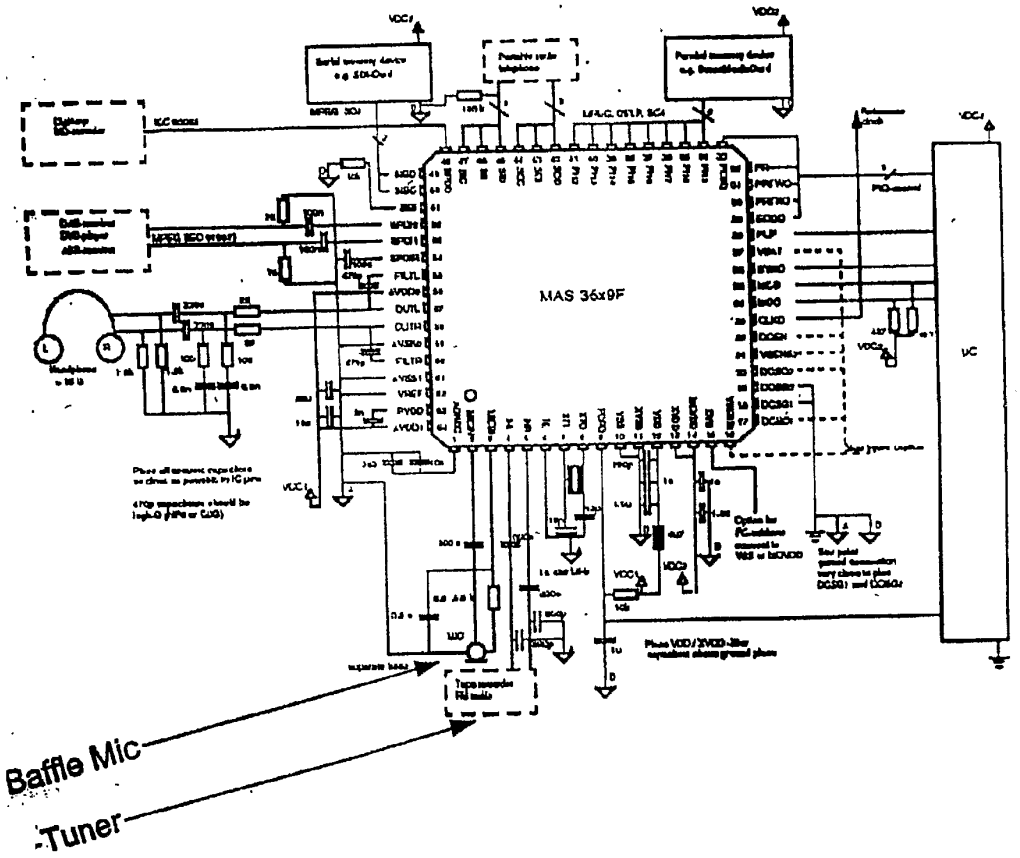


Figure 7.

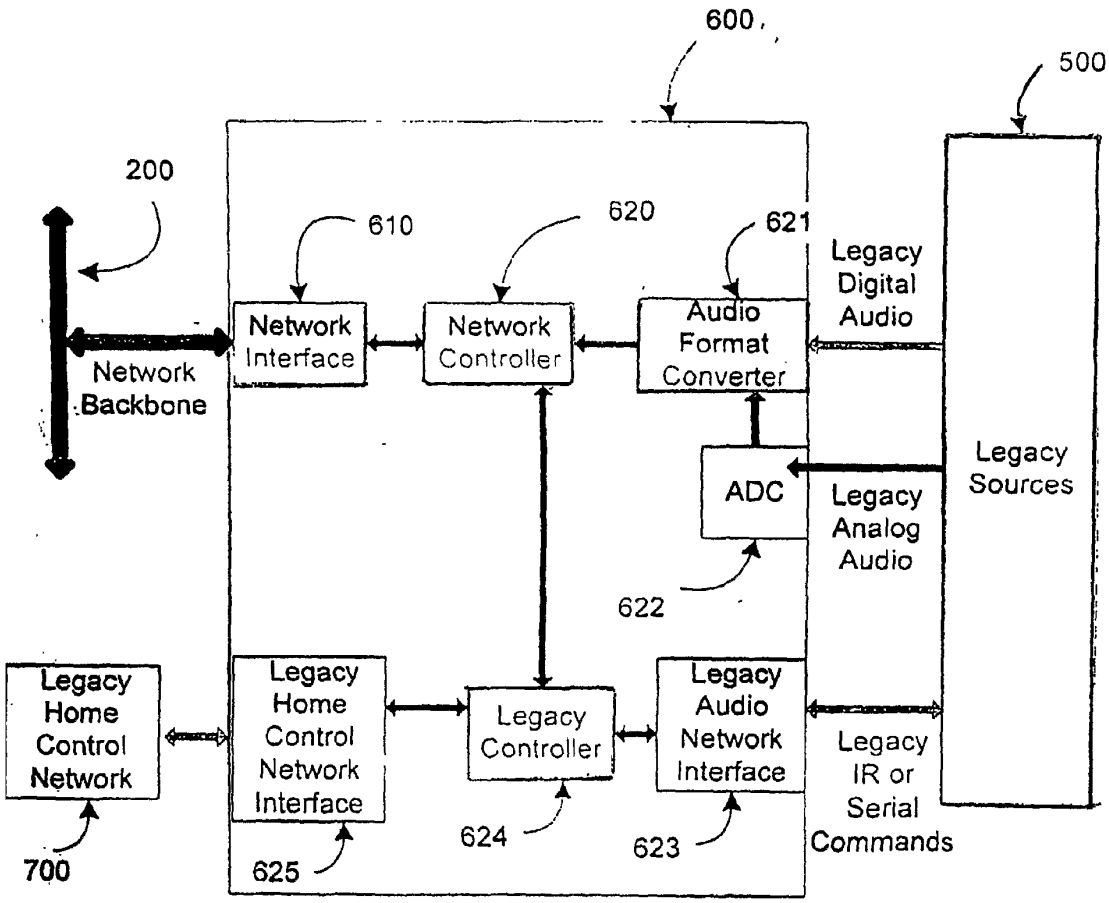


Figure 8.

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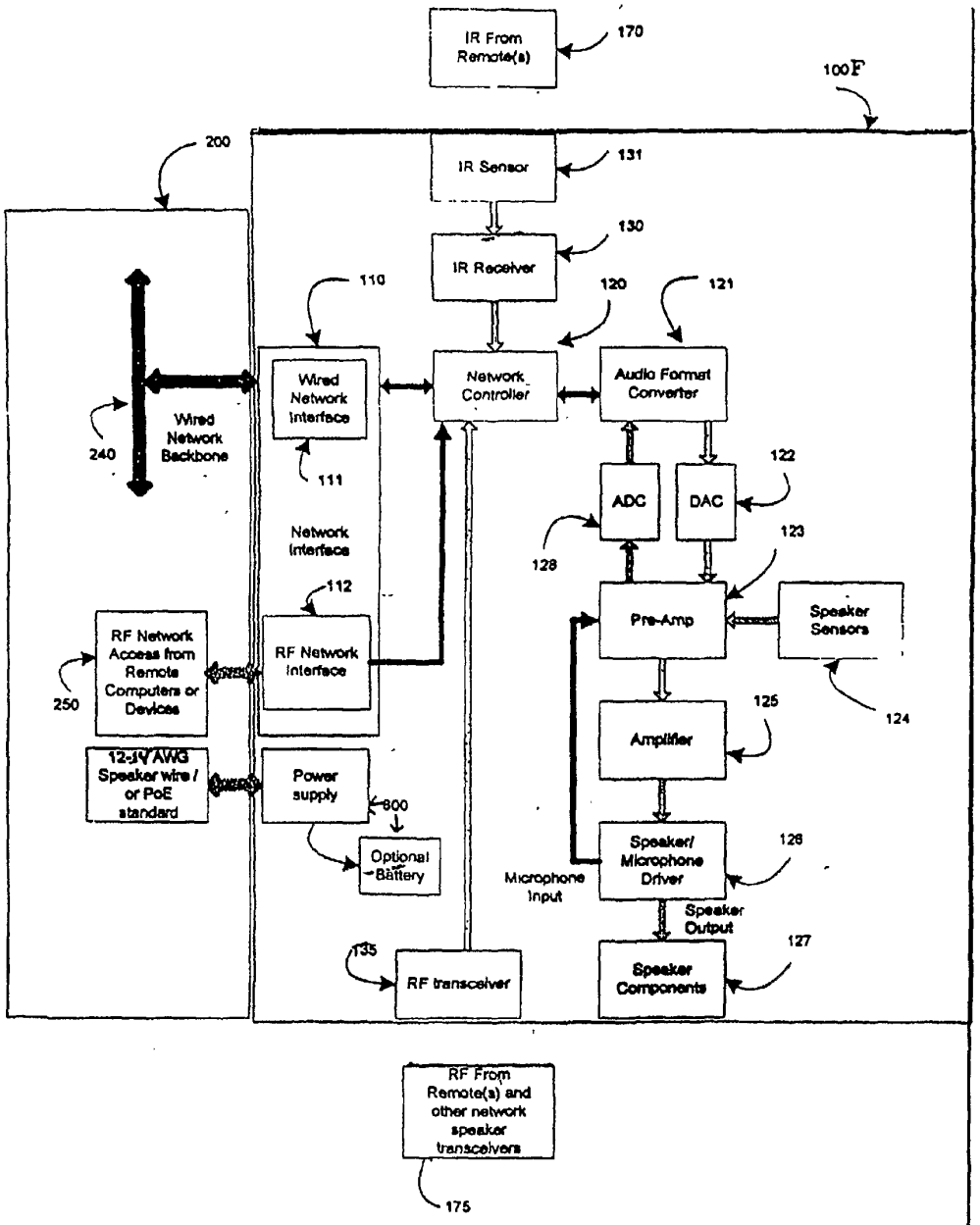

IR From Remote(s)
170
100F
200
IR Sensor
131
IR Receiver
130
110
120
121
Wired Network Interface
Network Controller
Audio Format Converter
240
Wired Network Backbone
111
Network Interface
ADC
DAC
122
128
123
112
RF Network Access from Remote Computers or Devices
RF Network Interface
Pre-Amp
Speaker Sensors
250
124
125
12-24 AWG Speaker wire / or PoE standard
Power supply
800
Amplifier
Optional Battery
Speaker/ Microphone Driver
126
Microphone Input
Speaker Output
135
127
RF transceiver
Speaker Components
RF From Remote(s) and other network speaker transceivers
175

Figure 9

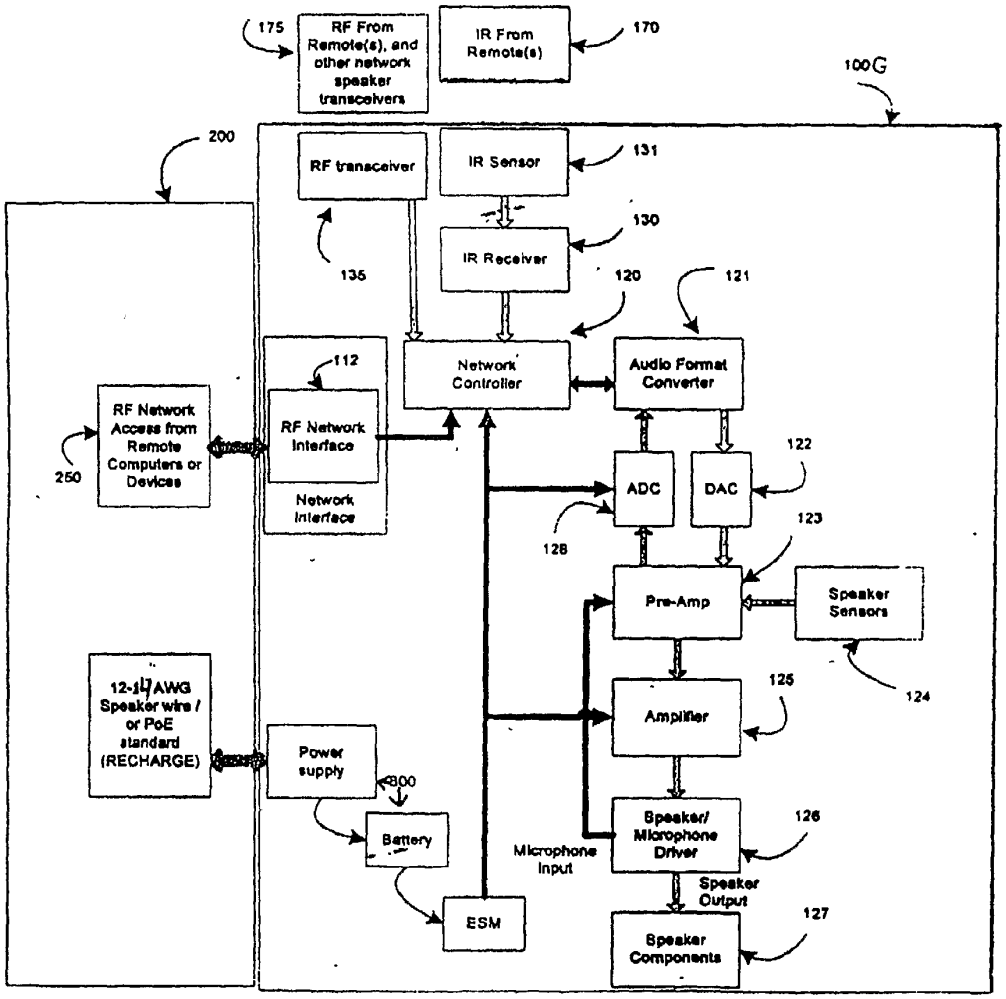


Figure 10

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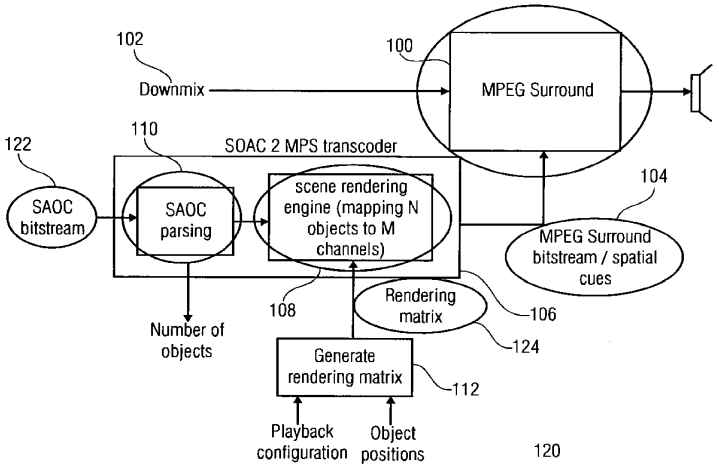
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(54) Title: APPARATUS AND METHOD FOR MULTI -CHANNEL PARAMETER TRANSFORMATION



(57) Abstract: A parameter transformer generates level parameters, indicating an energy relation between a first and a second audio channel of a multi-channel audio signal associated to a multi-channel loudspeake configuration. The level parameter are generated based on object parameters for a plurality of audio objects associated to a down-mix channel, which is generated using object audio signals associated to the audio objects. The object parameters comprise an energy parameter indicating an energy of the object audio signal. To derive the coherence and the level parameters, a parameter generator is used, which combines the energy parameter and object rendering parameters, which depend on a desired rendering configuration.

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Apparatus and Method for Multi-Channel Parameter Transformation

Field of the Invention

The present invention relates to a transformation of multi-channel parameters, and in particular to the generation of coherence parameters and level parameters, which indicate spatial properties between two audio signals, based on an object-parameter based representation of a spatial audio scene.

Background of the Invention and Prior Art

There are several approaches for parametric coding of multi-channel audio signals, such as 'Parametric Stereo (PS)', 'Binaural Cue Coding (BCC) for Natural Rendering' and 'MPEG Surround', which aim at representing a multi-channel audio signal by means of a down-mix signal (which could be either monophonic or comprise several channels) and parametric side information ('spatial cues') characterizing its perceived spatial sound stage.

Those techniques could be called channel-based, i.e. the techniques try to transmit a multi-channel signal already present or generated in a bitrate-efficient manner. That is, a spatial audio scene is mixed to a predetermined number of channels before transmission of the signal to match a predetermined loudspeaker set-up and those techniques aim at the compression of the audio channels associated to the individual loudspeakers.

The parametric coding techniques rely on a down-mix channel carrying audio content together with parameters, which describe the spatial properties of the original spatial audio scene and which are used on the receiving side to

reconstruct the multi-channel signal or the spatial audio scene.

A closely related group of techniques, e.g. 'BCC for Flexible Rendering', are designed for efficient coding of individual audio objects rather than channels of the same multi-channel signal for the sake of interactively rendering them to arbitrary spatial positions and independently amplifying or suppressing single objects without any a priori encoder knowledge thereof. In contrast to common parametric multi-channel audio coding techniques (which convey a given set of audio channel signals from an encoder to a decoder), such object coding techniques allow rendering of the decoded objects to any reproduction setup, i.e. the user on the decoding side is free to choose a reproduction setup (e.g. stereo, 5.1 surround) according to his preference.

Following the object coding concept, parameters can be defined, which identify the position of an audio object in space, to allow for flexible rendering on the receiving side. Rendering at the receiving side has the advantage, that even non-ideal loudspeaker set-ups or arbitrary loudspeaker set-ups can be used to reproduce the spatial audio scene with high quality. In addition, an audio signal, such as, for example, a down-mix of the audio channels associated with the individual objects, has to be transmitted, which is the basis for the reproduction on the receiving side.

Both discussed approaches rely on a multi-channel speaker set-up at the receiving side, to allow for a high-quality reproduction of the spatial impression of the original spatial audio scene.

As previously outlined, there are several state-of-the-art techniques for parametric coding of multi-channel audio signals which are capable of reproducing a spatial sound

image, which is - dependent on the available data rate - more or less similar to that of the original multi-channel audio content.

However, given some pre-coded audio material (i.e. spatial sound described by a given number of reproduction channel signals), such a codec does not offer any means for a-posteriori and interactive rendering of single audio objects according to the liking of the listener. On the other hand, there are spatial audio object coding techniques which are specially designed for the latter purpose, but since the parametric representations used in such systems are different from those for multi-channel audio signals, separate decoders are needed in case one wants to benefit from both techniques in parallel. The drawback that results from this situation is that, although the back-ends of both systems fulfill the same task, which is rendering of spatial audio scenes on a given loudspeaker setup, they have to be implemented redundantly, i.e. two separate decoders are necessary to provide both functionalities.

Another limitation of the prior-art object coding technology is the lack of a means for storing and / or transmitting pre-rendered spatial audio object scenes in a backwards compatible way. The feature of enabling interactive positioning of single audio objects provided by the spatial audio object coding paradigm turns out to be a drawback when it comes to identical reproduction of a readily rendered audio scene.

Summarizing, one is confronted with the unfortunate situation that, although a multi-channel playback environment may be present which implements one of the above approaches, a further playback environment may be required to also implement the second approach. It may be noted, that according to the longer history, channel-based coding schemes are much more common, such as, for example,

the famous 5.1 or 7.1/7.2 multi-channel signals stored on DVD or the like.

That is, even if a multi-channel audio decoder and associated playback equipment (amplifier stages and loudspeakers) are present, a user needs an additional complete set-up, i.e. at least an audio decoder, when he wants to play back object-based coded audio data. Normally, the multi-channel audio decoders are directly associated to the amplifier stages and a user does not have direct access to the amplifier stages used for driving the loudspeakers. This is, for example, the case in most of the commonly available multi-channel audio or multimedia receivers. Based on existing consumer electronics, a user desiring to be able to listen to audio content encoded with both approaches would even need a complete second set of amplifiers, which is, of course, an unsatisfying situation.

Summary of the Invention

It is therefore desirable to be able to provide a method to reduce the complexity of systems, which are capable of both decoding of parametric multi-channel audio streams as well as parametrically coded spatial audio object streams.

An embodiment of the invention is a multi-channel parameter transformer for generating a level parameter indicating an energy relation between a first audio signal and a second audio signal of a representation of a multi-channel spatial audio signal, comprising: an object parameter provider for providing object parameters for a plurality of audio objects associated to a down-mix channel depending on the object audio signals associated to the audio objects, the object parameters comprising an energy parameter for each audio object indicating an energy information of the object audio signal; and a parameter generator for deriving the level parameter by combining the energy parameters and

object rendering parameters related to a rendering configuration.

According to a further embodiment of the present invention, the parameter transformer generates a coherence parameter and a level parameter, indicating a correlation or coherence and an energy relation between a first and a second audio signal of a multi-channel audio signal associated to a multi-channel loudspeaker configuration. The correlation- and level parameters are generated based on provided object parameters for at least one audio object associated to a down-mix channel, which is itself generated using an object audio signal associated to the audio object, wherein the object parameters comprise an energy parameter indicating an energy of the object audio signal. To derive the coherence and the level parameter, a parameter generator is used, which combines the energy parameter and additional object rendering parameters, which are influenced by a playback configuration. According to some embodiments, the object rendering parameters comprise loudspeaker parameters indicating the location of the playback loudspeakers with respect to a listening position. According to some embodiments, the object rendering parameters comprise object location parameters indicating the location of the objects with respect to a listening position. To this end, the parameter generator takes advantage of synergy effects resulting from both spatial audio coding paradigms.

According to a further embodiment of the present invention, the multi-channel parameter transformer is operative to derive MPEG Surround compliant coherence and level parameters (ICC and CLD), which can furthermore be used to steer an MPEG Surround decoder. It is noted that Inter-channel coherence/cross-correlation (ICC) -represents the coherence or cross-correlation between the two input channels. When time differences are not included, coherence and correlation are the same. Stated differently, both

terms point to the same characteristic, when inter channel time differences or inter channel phase differences are not used.

In this way, a multi-channel parameter transformer together with a standard MPEG Surround-transformer can be used to reproduce an object-based encoded audio signal. This has the advantage, that only an additional parameter transformer is required, which receives a spatial audio object coded (SAOC) audio signal and which transforms the object parameters such, that they can be used by a standard MPEG SURROUND-decoder to reproduce the multi-channel audio signal via the existing playback equipment. Therefore, common playback equipment can be used without major modifications to also reproduce spatial audio object coded content.

According to a further embodiment of the present invention, the generated coherence and level parameters are multiplexed with the associated down-mix channel into a MPEG SURROUND compliant bitstream. Such a bitstream can then be fed to a standard MPEG SURROUND-decoder without requiring any further modifications to the existing playback environment.

According to a further embodiment of the present invention, the generated coherence and level parameters are directly transmitted to a slightly modified MPEG Surround-decoder, such that the computational complexity of a multi-channel parameter transformer can be kept low.

According to a further embodiment of the present invention, the generated multi-channel parameters (coherence parameter and level parameter) are stored after the generation, such that a multi-channel parameter transformer can also be used as a means for preserving the spatial information gained during scene rendering. Such scene rendering can, for example, also be performed at the music-studio while

generating the signals, such that a multi-channel compatible signal can be generated without any additional effort, using a multi-channel parameter transformer as described in more detail in the following paragraphs. Thus, pre-rendered scenes could be reproduced using legacy equipment.

Brief Description of the Drawings

Prior to a more detailed description of several embodiments of the present invention, a short review of the multi-channel audio coding and object audio coding techniques and spatial audio object coding techniques will be given. To this end, reference will also be made to the enclosed Figures.

Fig. 1a shows a prior art multi-channel audio coding scheme;

Fig. 1b shows a prior art object coding scheme;

Fig. 2 shows a spatial audio object coding scheme;

Fig. 3 shows an embodiment of a multi-channel parameter transformer;

Fig. 4 shows an example for a multi-channel loudspeaker configuration for playback of spatial audio content; and

Fig. 5 shows an example for a possible multi-channel parameter representation of spatial audio content;

Figs. 6a and 6b show application scenarios for spatial audio object coded content;

Fig. 7 shows an embodiment of a multi-channel parameter transformer; and

Fig. 8 shows an example of a method for generating a coherence parameter and a correlation parameter.

Detailed Description of Preferred Embodiments

Fig. 1a shows a schematic view of a multi-channel audio encoding and decoding scheme, whereas Fig. 1b shows a schematic view of a conventional audio object coding scheme. The multi-channel coding scheme uses a number of provided audio channels, i.e. audio channels already mixed to fit a predetermined number of loudspeakers. A multi-channel encoder 4 (SAC) generates a down-mix signal 6, being an audio signal generated using audio channels 2a to 2d. This down-mix signal 6 can, for example, be a monophonic audio channel or two audio channels, i.e. a stereo signal. To partly compensate for the loss of information during the down-mix, the multi-channel encoder 4 extracts multi-channel parameters, which describe the spatial interrelation of the signals of the audio channels 2a to 2d. This information is transmitted, together with the down-mix signal 6, as so-called side information 8 to a multi-channel decoder 10. The multi-channel decoder 10 utilizes the multi-channel parameters of the side information 8 to create channels 12a to 12d with the aim of reconstructing channels 2a to 2d as precisely as possible. This can, for example, be achieved by transmitting level parameters and correlation parameters, which describe an energy relation between individual channel pairs of the original audio channels 2a and 2d and which provide a correlation measure between pairs of channels of the audio channels 2a to 2d.

When decoding, this information can be used to redistribute the audio channels comprised in the down-mix signal to the

reconstructed audio channels 12a to 12d. It may be noted, that the generic multi-channel audio scheme is implemented to reproduce the same number of reconstructed channels 12a to 12d as the number of original audio channels 2a to 2d input into the multi-channel audio encoder 4. However, other decoding schemes can also be implemented, reproducing more or less channels than the number of the original audio channels 2a to 2d.

In a way, the multi-channel audio techniques schematically sketched in Fig. 1a (for example the recently standardized MPEG spatial audio coding scheme, i.e. MPEG Surround) can be understood as bitrate-efficient and compatible extension of existing audio distribution infrastructure towards multi-channel audio/surround sound.

Fig. 1b details the prior art approach to object-based audio coding. As an example, coding of sound objects and the ability of "content-based interactivity" is part of the MPEG-4 concept. The conventional audio object coding technique schematically sketched in Fig. 1b follows a different approach, as it does not try to transmit a number of already existing audio channels but to rather transmit a complete audio scene having multiple audio objects 22a to 22d distributed in space. To this end, a conventional audio object coder 20 is used to code multiple audio objects 22a to 22d into elementary streams 24a to 24d, each audio object having an associated elementary stream. The audio objects 22a to 22d (sound sources) can, for example, be represented by a monophonic audio channel and associated energy parameters, indicating the relative level of the audio object with respect to the remaining audio objects in the scene. Of course, in a more sophisticated implementation, the audio objects are not limited to be represented by *monophonic* audio channels. Instead, for example, stereo audio objects or multi-channel audio objects may be encoded.

A conventional audio object decoder 28 aims at reproducing the audio objects 22a to 22d, to derive reconstructed audio objects 28a to 28d. A scene composer 30 within a conventional audio object decoder allows for a discrete positioning of the reconstructed audio objects 28a to 28d (sources) and the adaptation to various loudspeakers set-ups. A scene is fully defined by a scene description 34 and associated audio objects. Some conventional scene composers 30 expect a scene description in a standardized language, e.g. BIFS (binary format for scene description). On the decoder side, arbitrary loudspeaker set-ups may be present and the decoder provides audio channels 32a to 32e to individual loudspeakers, which are optimally tailored to the reconstruction of the audio scene, as the full information on the audio scene is available on the decoder side. For example, binaural rendering is feasible, which results in two audio channels generated to provide a spatial impression when listened to via headphones.

An optional user interaction to the scene composer 30 enables a repositioning/repanning of the individual audio objects on the reproduction side. Additionally, positions or levels of specifically selected audio objects can be modified, to, for example, increase the intelligibility of a talker, when ambient noise objects or other audio objects related to different talkers in a conference are suppressed, i.e. decreased in level.

In other words, conventional audio object coders encode a number of audio objects into elementary streams, each stream associated to one single audio object. The conventional decoder decodes these streams and composes an audio scene under the control of a scene description (BIFS) and optionally based on user interaction. In terms of practical application, this approach suffers from several disadvantages:

Due to the separate encoding of each individual audio (sound) object, the required bitrate for transmission of the whole scene is significantly higher than rates used for a monophonic/stereophonic transmission of compressed audio. Obviously, the required bitrate grows approximately proportionally with the number of transmitted audio objects, i.e. with the complexity of the audio scene.

Consequently, due to the separate decoding of each sound object, the computational complexity for the decoding process significantly exceeds that one of a regular mono/stereo audio decoder. The required computational complexity for decoding grows approximately proportionally with the number of transmitted objects as well(assuming a low complexity composition procedure). When using advanced composition capabilities, i.e. using different computational nodes, these disadvantages are further increased by the complexity associated with the synchronization of corresponding audio nodes and with the overall complexity in running a structured audio engine.

Furthermore, since the total system involves several audio decoder components and a BIFS-based composition unit, the complexity of the required structure is an obstacle to the implementation in real-world applications. Advanced composition capabilities furthermore require the implementation of a structured audio engine with the above-mentioned complications.

Fig. 2 shows an embodiment of the inventive spatial audio object coding concept, allowing for a highly efficient audio object coding, circumventing the previously mentioned disadvantages of common implementations.

As it will become apparent from the discussion of Fig. 3 below, the concept may be implemented by modifying an existing MPEG Surround structure. However, the use of the MPEG Surround-framework is not mandatory, since other

common multi-channel encoding/decoding frameworks can also be used to implement the inventive concept.

Utilizing existing multi-channel audio coding structures, such as MPEG Surround, the inventive concept evolves into a bitrate-efficient and compatible extension of existing audio distribution infrastructure towards the capability of using an object-based representation. To distinguish from the prior approaches of audio object coding (AOC) and spatial audio coding (multi-channel audio coding), embodiments of the present invention will in the following be referred to using the term spatial audio object coding or its abbreviation SAOC.

The spatial audio object coding scheme shown in Fig. 2 uses individual input audio objects 50a to 50d. Spatial audio object encoder 52 derives one or more down-mix signals 54 (e.g. mono or stereo signals) together with side information 55 having information of the properties of the original audio scene.

The SAOC-decoder 56 receives the down-mix signal 54 together with the side information 55. Based on the down-mix signal 54 and the side information 55, the spatial audio object decoder 56 reconstructs a set of audio objects 58a to 58d. Reconstructed audio objects 58a to 58d are input into a mixer/rendering stage 60, which mixes the audio content of the individual audio objects 58a to 58d to generate a desired number of output channels 62a and 62b, which normally correspond to a multi-channel loudspeaker set-up intended to be used for playback.

Optionally, the parameters of the mixer/renderer 60 can be influenced according to a user interaction or control 64, to allow interactive audio composition and thus maintain the high flexibility of audio object coding.

The concept of spatial audio object coding shown in Fig. 2 has several great advantages as compared to other multi-channel reconstruction scenarios.

The transmission is extremely bitrate-efficient due to the use of down-mix signals and accompanying object parameters. That is, object based side information is transmitted together with a down-mix signal, which is composed of audio signals associated to individual audio objects. Therefore, the bit rate demand is significantly decreased as compared to approaches, where the signal of each individual audio object is separately encoded and transmitted. Furthermore, the concept is backwards compatible to already existing transmission structures. Legacy devices would simply render (compose) the downmix signal.

The reconstructed audio objects 58a to 58d can be directly transferred to a mixer/renderer 60 (scene composer). In general, the reconstructed audio objects 58a to 58d could be connected to any external mixing device (mixer/renderer 60), such that the inventive concept can be easily implemented into already existing playback environments. The individual audio objects 58a … d could principally be used as a solo presentation, i.e. be reproduced as a single audio stream, although they are usually not intended to serve as a high quality solo reproduction.

In contrast to separate SAOC decoding and subsequent mixing, a combined SAOC-decoder and mixer/renderer is extremely attractive because it leads to very low implementation complexity. As compared to the straight forward approach, a full decoding/reconstruction of the objects 58a to 58d as an intermediate representation can be avoided. The necessary computation is mainly related to the number of intended output rendering channels 62a and 62b. As it becomes apparent from Fig. 2, mixer/renderer 60 associated to the SAOC-decoder can in principle be any algorithm suitable of combining single audio objects into a

scene, i.e. suitable of generating output audio channels 62a and 6b associated to individual loudspeakers of a multi-channel loudspeaker set-up. This could, for example, include mixers performing amplitude panning (or amplitude and delay panning), vector based amplitude panning (VBAP schemes) and binaural rendering, i.e. rendering intended to provide a spatial listening experience utilizing only two loudspeakers or headphones. For example, MPEG Surround employs such binaural rendering approaches.

Generally, transmitting down-mix signals 54 associated with corresponding audio object information 55 can be combined with arbitrary multi-channel audio coding techniques, such as, for example, parametric stereo, binaural cue coding or MPEG Surround.

Fig. 3 shows an embodiment of the present invention, in which object parameters are transmitted together with a down-mix signal. In the SAOC decoder structure 120, a MPEG Surround decoder can be used together with a multi-channel parameter transformer, which generates MPEG parameters using the received object parameters. This combination results in an spatial audio object decoder 120 with extremely low complexity. In other words, this particular example offers a method for transforming (spatial audio) object parameters and panning information associated with each audio object into a standards compliant MPEG Surround bitstream, thus extending the application of conventional MPEG Surround decoders from reproducing multi-channel audio content towards the interactive rendering of spatial audio object coding scenes. This is achieved without having to apply modifications to the MPEG Surround decoder itself.

The embodiment shown in Fig. 3 circumvents the drawbacks of conventional technology by using a multi-channel parameter transformer together with an MPEG Surround decoder. While the MPEG Surround decoder is commonly available technology, a multi-channel parameter transformer provides a

transcoding capability from SAOC to MPEG Surround. These will be detailed in the following paragraphs, which will additionally make reference to Figs. 4 and 5, illustrating certain aspects of the combined technologies.

In Fig. 3, an SAOC decoder 120 has an MPEG Surround decoder 100 which receives a down-mix signal 102 having the audio content. The downmix signal can be generated by an encoder-side downmixer by combining (e.g. adding) the audio object signals of each audio object in a sample by sample manner. Alternatively, the combining operation can also take place in a spectral domain or filterbank domain. The downmix channel can be separate from the parameter bitstream 122 or can be in the same bitstream as the parameter bitstream.

The MPEG Surround decoder 100 additionally receives spatial cues 104 of an MPEG Surround bitstream, such as coherence parameters ICC and level parameters CLD, both representing the signal characteristics between two audio signals within the MPEG Surround encoding/decoding scheme, which is shown in Fig. 5 and which will be explained in more detail below.

A multi-channel parameter transformer 106 receives SAOC parameters (object parameters) 122 related to audio objects, which indicate properties of associated audio objects contained within Downmix Signal 102. Furthermore, the transformer 106 receives object rendering parameters via an object rendering parameters input. These parameters can be the parameters of a rendering matrix or can be parameters useful for mapping audio objects into a rendering scenario. Depending on the object positions exemplarily adjusted by the user and input into block 12, the rendering matrix will be calculated by block 112. The output of block 112 is then input into block 106 and particularly into the parameter generator 108 for calculating the spatial audio parameters. When the loudspeaker configuration changes, the rendering matrix or generally at least some of the object rendering parameters

change as well. Thus, the rendering parameters depend on the rendering configuration, which comprises the loudspeaker configuration/playback configuration or the transmitted or user-selected object positions, both of which can be input into block 112.

A parameter generator 108 derives the MPEG Surround spatial cues 104 based on the object parameters, which are provided by object parameter provider (SAOC parser) 110. The parameter generator 108 additionally makes use of rendering parameters provided by a weighting factor generator 112. Some or all of the rendering parameters are weighting parameters describing the contribution of the audio objects contained in the down-mix signal 102 to the channels created by the spatial audio object decoder 120. The weighting parameters could, for example, be organized in a matrix, since these serve to map a number of N audio objects to a number M of audio channels, which are associated to individual loudspeakers of a multi-channel loudspeaker set-up used for playback. There are two types of input data to the multi-channel parameter transformer (SAOC 2 MPS transcoder). The first input is an SAOC bitstream 122 having object parameters associated to individual audio objects, which indicate spatial properties (e.g. energy information) of the audio objects associated to the transmitted multi-object audio scene. The second input is the rendering parameters (weighting parameters) 124 used for mapping the N objects to the M audio-channels.

As previously discussed, the SAOC bitstream 122 contains parametric information about the audio objects that have been mixed together to create the down-mix signal 102 input into the MPEG Surround decoder 100. The object parameters of the SAOC bitstream 122 are provided for at least one audio object associated to the down-mix channel 102, which was in turn generated using at least an object audio signal associated to the audio object. A suitable parameter is, for example, an energy parameter, indicating an energy of

the object audio signal, i.e. the strength of the contribution of the object audio signal to the down-mix 102. In case a stereo downmix is used, a direction parameter might be provided, indicating the location of the audio object within the stereo downmix. However, other object parameters are obviously also suited and could therefore be used for the implementation.

The transmitted downmix does not necessarily have to be a monophonic signal. It could, for example, also be a stereo signal. In that case, 2 energy parameters might be transmitted as object parameters, each parameter indicating each object's contribution to one of the two channels of the stereo signal. That is, for example, if 20 audio objects are used for the generation of the stereo downmix signal, 40 energy parameters would be transmitted as the object parameters.

The SAOC bit stream 122 is fed into an SAOC parsing block, i.e. into object parameter provider 110, which regains the parametric information, the latter comprising, besides the actual number of audio objects dealt with, mainly object level envelope (OLE) parameters which describe the time-variant spectral envelopes of each of the audio objects present.

The SAOC parameters will typically be strongly time dependent, as they transport the information, as to how the multi-channel audio scene changes with time, for example when certain objects emanate or others leave the scene. To the contrary, the weighting parameters of rendering matrix 124 do often not have a strong time or frequency dependency. Of course, if objects enter or leave the scene, the number of required parameters changes abruptly, to match the number of the audio objects of the scene. Furthermore, in applications with interactive user control, the matrix elements may be time variant, as they are then depending on the actual input of a user.

In a further embodiment of the present invention, parameters steering a variation of the weighting parameters or the object rendering parameters or time-varying object rendering parameters (weighting parameters) themselves may be conveyed in the SAOC bitstream, to cause a variation of rendering matrix 124. The weighting factors or the rendering matrix elements may be frequency dependent, if frequency dependent rendering properties are desired (as for example when a frequency-selective gain of a certain object is desired).

In the embodiment of Fig. 3, the rendering matrix is generated (calculated) by a weighting factor generator 112 (rendering matrix generation block) based on information about the playback configuration (that is a scene description). This might, on the one hand, be playback configuration information, as for example loudspeaker parameters indicating the location or the spatial positioning of the individual loudspeakers of a number of loudspeakers of the multi-channel loudspeaker configuration used for playback. The rendering matrix is furthermore calculated based on object rendering parameters, e.g. on information indicating the location of the audio objects and indicating an amplification or attenuation of the signal of the audio object. The object rendering parameters can, on the one hand, be provided within the SAOC bitstream if a realistic reproduction of the multi-channel audio scene is desired. The object rendering parameters (e.g. location parameters and amplification information (panning parameters)) can alternatively also be provided interactively via a user interface. Naturally, a desired rendering matrix, i.e. desired weighting parameters, can also be transmitted together with the objects to start with a naturally sounding reproduction of the audio scene as a starting point for interactive rendering on the decoder side.

The parameter generator (scene rendering engine) 108 receives both, the weighting factors and the object parameters (for example the energy parameter OLE) to calculate a mapping of the N audio objects to M output channels, wherein M may be larger than, less than or equal to N and furthermore even varying with time. When using a standard MPEG Surround decoder 100, the resulting spatial cues (for example, coherence and level parameters) may be transmitted to the MPEG-decoder 100 by means of a standards-compliant surround bitstream matching the down-mix signal transmitted together with the SAOC bitstream.

Using a multi-channel parameter transformer 106, as previously described, allows using a standard MPEG Surround decoder to process the down-mix signal and the transformed parameters provided by the parameter transformer 106 to play back the reconstruction of the audio scene via the given loudspeakers. This is achieved with the high flexibility of the audio object coding-approach, i.e. by allowing serious user interaction on the playback side.

As an alternative to the playback of a multi-channel loudspeaker set-up, a binaural decoding mode of the MPEG Surround decoder may be utilized to play back the signal via headphones.

However, if minor modifications to the MPEG Surround decoder 100 are acceptable, e.g. within a software-implementation, the transmission of the spatial cues to the MPEG Surround decoder could also be performed directly in the parameter domain. I.e., the computational effort of multiplexing the parameters into an MPEG Surround compatible bitstream can be omitted. Apart from the decrease in computational complexity, a further advantage is to avoid of a quality degradation introduced by the MPEG-conforming parameter quantization, since such quantization of the generated spatial cues would in this case no longer be necessary. As already mentioned, this

benefit calls for a more flexible MPEG Surround decoder implementation, offering the possibility of a direct parameter feed rather than a pure bitstream feed.

In another embodiment of the present invention, an MPEG Surround compatible bitstream is created by multiplexing the generated spatial cues and the down-mix signal, thus offering the possibility of a playback via legacy equipment. Multi-channel parameter transformer 106 could thus also serve the purpose of transforming audio object coded data into multi-channel coded data at the encoder side. Further embodiments of the present invention, based on the multi-channel parameter transformer of Fig. 3 will in the following be described for specific object audio and multi-channel implementations. Important aspects of those implementations are illustrated in Figs. 4 and 5.

Fig. 4 illustrates an approach to implement amplitude panning, based on one particular implementation, using direction (location) parameters as object rendering parameters and energy parameters as object parameters. The object rendering parameters indicate the location of an audio object. In the following paragraphs, angles α_i 150 will be used as object rendering (location) parameters, which describe the direction of origin of an audio object 152 with respect to a listening position 154. In the following examples, a simplified two-dimensional case will be assumed, such that one single parameter, i.e. an angle, can be used to unambiguously parameterize the direction of origin of the audio signal associated with the audio object. However, it goes without saying, that the general three-dimensional case can be implemented without having to apply major changes. That is, having for exampled a three-dimensional space, vectors could be used to indicate the location of the audio objects within the spatial audio scene. As an MPEG Surround decoder shall in the following be used to implement the inventive concept, Fig. 4 additionally shows the loudspeaker locations of a five-

channel MPEG multi-channel loudspeaker configuration. When the position of a centre loudspeaker 156a(C) is defined to be at 0°, a right front speaker 156b is located at 30°, a right surround speaker 156c is located at 110°, a left surround speaker 156d is located at -110° and a left front speaker 156e is located at -30°.

The following examples will furthermore be based on 5.1-channel representations of multi-channel audio signals as specified in the MPEG Surround standard, which defines two possible parameterisations, that can be visualized by the tree-structures shown in Fig. 5.

In case of the transmission of a mono-down-mix 160, the MPEG Surround decoder employs a tree-structure parameterization. The tree is populated by so-called OTT elements (boxes) 162a to 162e for the first parameterization and 164a to 164e for the second parameterization.

Each OTT element up-mixes a mono-input into two output audio signals. To perform the up-mix, each OTT element uses an ICC parameter describing the desired cross-correlation between the output signals and a CLD parameter describing the relative level differences between the two output signals of each OTT element.

Even though structurally similar, the two parameterizations of Fig. 5 differ in the way the audio-channel content is distributed from the monophonic down-mix 160. For example, in the left tree-structure, the first OTT element 162a generates a first output channel 166a and a second output channel 166b. According to the visualization in Fig. 5, the first output channel 166a comprises information on the audio channels of the left front, the right front, the centre and the low frequency enhancement channel. The second output signal 166b comprises only information on the surround channels, i.e. on the left surround and the right

surround channel. When compared to the second implementation, the output of the first OTT element differs significantly with respect to the audio channels comprised.

However, a multi-channel parameter transformer can be implemented based on either of the two implementations. Once the inventive concept is understood, it may also be applied to other multi channel configurations than the ones described below. For the sake of conciseness, the following embodiments of the present invention focus on the left parameterization of Fig. 5, without loss of generality. It may furthermore be noted, that Fig. 5 only serves as an appropriate visualization of the MPEG-audio concept and that the computations are normally not performed in a sequential manner, as one might be tempted to believe by the visualizations of Fig. 5. Generally, the computations can be performed in parallel, i.e. the output channels can be derived in one single computational step.

In the embodiments briefly discussed in the following paragraphs, an SAOC bitstream comprises (relative) levels of each audio object in the down-mixed signal (for each time-frequency tile separately, as is common practice within a frequency-domain framework using, for example, a filterbank or a time-to-frequency transformation).

Furthermore, the present invention is not limited to a specific level representation of the objects, the description below merely illustrates one method to calculate the spatial cues for the MPEG Surround bitstream based on an object power measure that can be derived from the SAOC object parameterization.

As is apparent from Fig. 3, the rendering matrix W, which is generated by weighting parameters and used by the parameter generator 108 to map the objects o_i to the required number of output channels (e.g. the number of loudspeakers) s, has a number of weighting parameters,

which depends on the particular object index i and the channel index s. As such, a weighting parameter $w_{s,i}$ denotes the mixing gain of object i ($1 \leq i \leq N$) to loudspeaker s ($1 \leq s \leq M$). That is, $\mathbf{W}$ maps objects $o=[o_1 \ \ldots \ o_N]^T$ to loudspeakers, generating the output signals for each loudspeaker (here assuming a 5.1 set-up) $y=[y_{Lf} \ y_{Rf} \ y_C \ y_{LFE} \ y_{Ls} \ y_{Rs} \ ]^T$, thus:

$$y = Wo .$$

The parameter generator (the rendering engine 108) utilizes the rendering matrix W to estimate all CLD and ICC parameters based on SAOC data σ_i^2. With respect to the visualizations of Fig. 5, it becomes apparent, that this process has to be performed for each OTT element independently. A detailed discussion will focus on the first OTT element 162a, since the teachings of the following paragraphs can be adapted to the remaining OTT elements without further inventive skill.

As it can be observed, the first output signal 166a of OTT element 162a is processed further by OTT elements 162b, 162c and 162d, finally resulting in output channels LF, RF, C and LFE. The second output channel 166b is processed further by OTT element 162e, resulting in output channels LS and RS. Substituting the OTT elements of Fig. 5 with one single rendering matrix W can be performed by using the following matrix W:

$$W = \begin{bmatrix} w_{Lf,1} \cdots & w_{Lf,N} \\ w_{Rf,1} \cdots & w_{Rf,N} \\ w_{C,1} \cdots & w_{C,N} \\ w_{LFE,1} \cdots & w_{LFE,N} \\ w_{Ls,1} \cdots & w_{Ls,N} \\ w_{Rs,1} \cdots & w_{Rs,N} \end{bmatrix}$$

The number N of the columns of matrix W is not fixed, as N is the number of audio objects, which might be varying.

One possibility to derive the spatial cues (CLD and ICC) for the OTT element 162a is that the respective contribution of each object to the two outputs of OTT element 0 is obtained by summation of the corresponding elements in **W**. This summation gives a sub-rendering matrix $\mathbf{W}_0$ of OTT element 0:

$$W_0 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{Lf,1} + w_{Rf,1} + w_{C,1} + w_{LFE,1} & \cdots & w_{Lf,N} + w_{Rf,N} + w_{C,N} + w_{LFE,N} \\ w_{Ls,1} + w_{Rs,1} & \cdots & w_{Ls,N} + w_{Rs,N} \end{bmatrix}$$

The problem is now simplified to estimating the level difference and correlation for sub-rendering matrix $\mathbf{W}_0$ (and for similarly defined sub-rendering matrices $\mathbf{W}_1$, $\mathbf{W}_2$, $\mathbf{W}_3$ and $\mathbf{W}_4$ related to the OTT elements 1, 2, 3 and 4, respectively).

Assuming fully incoherent (i.e. mutually independent) object signals, the estimated power of the first output of OTT element 0, $p_{0,1}^2$, is given by:

$$p_{0,1}^2 = \sum_i w_{1,i}^2 \sigma_i^2 .$$

Similarly, the estimated power of the second output of OTT element 0, $p_{0,2}^2$, is given by:

$$p_{0,2}^2 = \sum_i w_{2,i}^2 \sigma_i^2 .$$

The cross-power R_0 is given by:

$$R_0 = \sum_i w_{1,i} w_{2,i} \sigma_i^2 .$$

The CLD parameter for OTT element 0 is then given by:

$$CLD_0 = 10 \log_{10} \left(\frac{p_{0,1}^2}{p_{0,2}^2} \right),$$

and the ICC parameter is given by:

$$ICC_0 = \left(\frac{R_0}{p_{0,1} p_{0,2}} \right).$$

When Fig. 5 left portion is considered, both signals for which $p_{0,1}$ and $p_{0,2}$ have been determined as shown above are

virtual signals, since these signals represent a combination of loudspeaker signals and do not constitute actually occurring audio signals. At this point, it is emphasized that the tree structures in Fig. 5 are not used for generation of the signals. This means that in the MPEG surround decoder, any signals between the one-to-two boxes do not exist. Instead, there is a big upmix matrix using the donwnmix and the different parameters to more or less directly generate the loudspeaker signals.

Below, the grouping or identification of channels for the left configuration of Fig. 5 is described.

For box 162a, the first virtual signal is the signal representing a combination of the loudspeaker signals lf, rf, c, lfe. The second virtual signal is the virtual signal representing a combination of ls and rs.

For box 162b, the first audio signal is a virtual signal and represents a group including a left front channel and a right front channel, and the second audio signal is a virtual signal and represents a group including a center channel and an lfe channel.

For box 162e, the first audio signal is a loudspeaker signal for the left surround channel and the second audio signal is a loudspeaker signal for the right surround channel.

For box 162c, the first audio signal is a loudspeaker signal for the left front channel and the second audio signal is a loudspeaker signal for the right front channel.

For box 162d, the first audio signal is a loudspeaker signal for the center channel and the second audio signal

is a loudspeaker signal for the low frequency enhancement channel.

In these boxes, the weighting parameters for the first audio signal or the second audio signal are derived by combining object rendering parameters associated to the channels represented by the first audio signal or the second audio signal as will be outlined later on.

Below, the grouping or identification of channels for the right configuration of Fig. 5 is described.

For box 164a, the first audio signal is a virtual signal and represents a group including a left front channel, a left surround channel, a right front channel, and a right surround channel, and the second audio signal is a virtual signal and represents a group including a center channel and a low frequency enhancement channel.

For box 164b, the first audio signal is a virtual signal and represents a group including a left front channel and a left surround channel, and the second audio signal is a virtual signal and represents a group including a right front channel and a right surround channel.

For box 164e, the first audio signal is a loudspeaker signal for the center channel and the second audio signal is a loudspeaker signal for the low frequency enhancement channel.

For box 164c, the first audio signal is a loudspeaker signal for the left front channel and the second audio signal is a loudspeaker signal for the left surround channel.

For box 164d, the first audio signal is a loudspeaker signal for the right front channel and the second audio signal is a loudspeaker signal for the right surround channel.

In these boxes, the weighting parameters for the first audio signal or the second audio signal are derived by combining object rendering parameters associated to the channels represented by the first audio signal or the second audio signal as will be outlined later on.

The above mentioned virtual signals are virtual, since they do not necessarily occur in an embodiment. These virtual signals are used to illustrate the generation of power values or the distribution of energy which is determined by CLD for all boxes e.g. by using different sub-rendering matrices $\mathbf{W}_i$. Again, the left side of Fig. 5 is described first

Above, the sub-rendering matrix $\mathbf{W}_0$ for box 162a has been shown.

For box 162b, the sub-rendering matrix is defined as:

$$W_1 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{lf,1} + w_{rf,1} & \cdots & w_{lf,N} + w_{rf,N} \\ w_{c,1} + w_{lfe,1} & \cdots & w_{c,N} + w_{lfe,N} \end{bmatrix}$$

For box 162e, the sub-rendering matrix is defined as:

$$W_2 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{ls,1} & \cdots & w_{ls,N} \\ w_{rs,1} & \cdots & w_{rs,N} \end{bmatrix}$$

For box 162c, the sub-rendering matrix is defined as:

$$W_3 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{lf,1} & \cdots & w_{lf,N} \\ w_{rf,1} & \cdots & w_{rs,N} \end{bmatrix}$$

For box 162d, the sub-rendering matrix is defined as:

$$W_4 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{c,1} & \cdots & w_{c,N} \\ w_{lfe,1} & \cdots & w_{lfe,N} \end{bmatrix}$$

For the right configuration in Fig. 5, the situation is as follows:

For box 164a, the sub-rendering matrix is defined as:

$$W_0 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{lf,1} + w_{ls,1} + w_{rf,1} + w_{rs,1} & \cdots & w_{lf,N} + w_{ls,N} + w_{rf,N} + w_{rs,N} \\ w_{c,1} + w_{lfe,1} & \cdots & w_{c,N} + w_{lfe,N} \end{bmatrix}$$

For box 164b, the sub-rendering matrix is defined as:

$$W_1 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{lf,1} + w_{ls,1} & \cdots & w_{lf,N} + w_{ls,N} \\ w_{rf,1} + w_{rs,1} & \cdots & w_{rf,N} + w_{rs,N} \end{bmatrix}$$

For box 164e, the sub-rendering matrix is defined as:

$$W_2 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{c,1} & \cdots & w_{c,N} \\ w_{lfe,1} & \cdots & w_{lfe,N} \end{bmatrix}$$

For box 164c, the sub-rendering matrix is defined as:

$$W_3 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{lf,1} & \cdots & w_{lf,N} \\ w_{ls,1} & \cdots & w_{ls,N} \end{bmatrix}$$

For box 164d, the sub-rendering matrix is defined as:

$$W_4 = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ w_{2,1} & \cdots & w_{2,N} \end{bmatrix} = \begin{bmatrix} w_{rf,1} & \cdots & w_{rf,N} \\ w_{rs,1} & \cdots & w_{rs,N} \end{bmatrix}$$

Depending on the implementation, the respective CLD and ICC parameter may be quantized and formatted to fit into an MPEG Surround bitstream, which could be fed into MPEG Surround decoder 100. Alternatively, the parameter values could be passed to the MPEG Surround decoder on a parameter level, i.e. without quantization and formatting into a bitstream. To not only achieve repanning of the objects, i.e. distributing these signal energies appropriately, which can be achieved using the above approach utilizing the MPEG-2 structure of Fig. 5, but to also implement attenuation or amplification, so-called arbitrary down-mix gains may also be generated for a modification of the down-mix signal energy. Arbitrary down-mix gains (ADG) allow for a spectral modification of the down-mix signal itself, before it is processed by one of the OTT elements. That is, arbitrary down-mix gains are per se frequency dependent. For an efficient implementation, arbitrary down-mix gains ADGs are represented with the same frequency resolution and the same quantizer steps as CLD-parameters. The general goal of the application of ADGs is to modify the transmitted down-mix in a way that the energy distribution in the down-mix input signal resembles the energy of the down-mix of the rendered system output. Using the weighting parameters $W_{k,i}$ of the rendering matrix W and the transmitted object powers σ_i^2 appropriate ADGs can be calculated using the following equation:

$$ADG\ [dB] = 10\log_{10}\left(\frac{\sum_k \sum_i w_{k,i}^2 \sigma_i^2}{\sum_i \sigma_i^2}\right),$$

and it is assumed, that the power of the input down-mix signal is equal to the sum of the object powers (i = object index, k = channel index).

As previously discussed, the computation of the CLD and ICC-parameters utilizes weighting parameters indicating a portion of the energy of the object audio signal associated to loudspeakers of the multi-channel loudspeaker configuration. These weighting factors will generally be dependent on scene data and playback configuration data, i.e. on the relative location of audio objects and loudspeakers of the multi-channel loudspeaker set-up. The following paragraphs will provide one possibility to derive the weighting parameters, based on the object audio parameterization introduced in Fig. 4, using an azimuth angle and a gain measure as object parameters associated to each audio object.

As already outlined above, there are independent rendering matrices for each time/frequency tile; however in the following only one single time/frequency tile is regarded for the sake of clarity. The rendering matrix **W** has got M lines (one for each output channel) and, N columns (one for each audio object) where the matrix element in line *s* and column *i* represents the mixing weight with which the particular audio object contributes to the respective output channel:

$$W = \begin{bmatrix} w_{1,1} & \cdots & w_{1,N} \\ \vdots & \ddots & \vdots \\ w_{M,1} & \cdots & w_{M,N} \end{bmatrix}$$

The matrix elements are calculated from the following scene description and loudspeaker configuration parameters:

Scene description (these parameters can vary over time):

- Number of audio objects: $N \geq 1$
- Azimuth angle for each audio object: α_i $(1 \leq i \leq N)$
- Gain value for each object: g_i $(1 \leq i \leq N)$

Loudspeaker configuration (usually these parameters are time-invariant):

- Number of output channels (= speakers): $M \geq 2$
- Azimuth angle for each speaker: θ_s $(1 \leq s \leq M)$
- $\theta_s \leq \theta_{s+1}$ $\forall s$ with $1 \leq s \leq M-1$

The elements of the mixing matrix are derived from these parameters by pursuing the following scheme for each audio object i:

- Find index s' $(1 \leq s' \leq M)$ with $\theta_{s'} \leq \alpha_i \leq \theta_{s'+1}$ $(\theta_{M+1} := \theta_1+2\pi)$
- Apply amplitude panning (e.g. tangent law) between speakers s' and s'+1 (between speakers M and 1 in case of s'=M). In the following description, the variables v are the panning weights, i.e. the scaling factors to be applied to a signal, when it is distributed between two channels, as for example illustrated in Fig. 4.:

$$\frac{\tan\left(\frac{1}{2}\left(\theta_{s'}+\theta_{s'+1}\right)-\alpha_i\right)}{\tan\left(\frac{1}{2}\left(\theta_{s'+1}-\theta_{s'}\right)\right)}=\frac{v_{1,i}-v_{2,i}}{v_{1,i}+v_{2,i}} \quad ; \quad \sqrt[p]{v_{1,i}^p+v_{2,i}^p}=1 \; ; \quad 1 \leq p \leq 2.$$

With respect to the above equations, it may be noted that in the two-dimensional case, an object audio signal associated to an audio object of the spatial audio scene will be distributed between the two speakers of the multi-channel loudspeaker configuration, which are closest to the audio object. However, the object parameters chosen for the above implementation are not the only object parameters which can be used to implement further embodiments of the present invention. For example, in a three-dimensional case, object parameters indicating the location of the loudspeakers or the audio objects may be three-dimensional vectors. Generally, two parameters are required for the two-dimensional case and three parameters are required for the three-dimensional case, when the location shall be unambiguously defined. However, even in the two-dimensional case, different parameterizations may be used, for example transmitting two coordinates within a rectangular coordinate system. It may furthermore be noted, that the optional panning rule parameter p, which is within a range of 1 to 2, is an arbitrary panning rule parameter, which is

set to reflect room acoustic properties of a reproduction system/room, and which is, according to some embodiments of the present invention, additionally applicable. Finally, the weighting parameters $W_{s,i}$ can be derived according to the following formula, after the panning weights $V_{1,i}$ and $V_{2,i}$ have been derived according to the above equations. The matrix elements are finally given by the following equations:

$$w_{s,i} = \begin{cases} \sqrt{g_i} \cdot v_{1,i} & for \quad s = s' \\ \sqrt{g_i} \cdot v_{2,i} & for \quad s = s'+1 \\ 0 & otherwise \end{cases}$$

The previously introduced gain factor g_i, which is optionally associated to each audio object, may be used to emphasize or suppress individual objects. This may, for example, be performed on the receiving side, i.e. in the decoder, to improve the intelligibility of individually chosen audio objects.

The following example of audio object 152 of Fig. 4 shall again serve to clarify the application of the above equations. The example utilizes the ITU-R BS.775-1 conforming 3/2-channel setup previously described. It is the aim to derive the desired panning direction of an audio object i, characterized by an azimuthal angle $\alpha_i = 60°$, with an arbitrary panning gain g_i of 1, (i.e. 0 dB). With this example, the playback room shall exhibit some reverberation, parameterized by the panning rule parameter p = 2. According to Fig. 4, it is apparent that the closest loudspeakers are the right front loudspeaker 156b and the right surround loudspeaker 156c. Therefore, the panning weights can be found by solving the following equations:

$$\frac{\tan 10°}{\tan 40°} = \frac{v_{1,i} - v_{2,i}}{v_{1,i} + v_{2,i}} \quad ; \qquad \sqrt{v_{1,i}^2 + v_{2,i}^2} = 1 .$$

After some mathematics, this leads to the solution:

$v_{1,i} \approx 0.8374$; $v_{2,i} \approx 0.5466$.

Therefore, according to the above instructions, the weighting parameters (matrix elements) associated to the specific audio object located in direction α_i are derived to be:

w1 = w2 = w3 = 0 ; w4 = 0.8374 ; w5 = 0.5466.

The above paragraphs detail embodiments of the present invention utilizing only audio objects, which can be represented by a monophonic signal, i.e. point-like sources. However, the flexible concept is not restricted to the application with monophonic audio sources. To the contrary, one or more objects, which are to be regarded as spatially "diffuse" do also fit well into the inventive concept. Multi-channel parameters have to be derived in an appropriate manner, when non point-like sources or audio objects are to be represented. An appropriate measure to quantify an amount of diffuseness between one or more audio objects, is an object-related cross-correlation parameter ICC.

In the SAOC system discussed so far all audio objects were supposed to be point sources, i.e. pair-wise uncorrelated mono sound sources without any spatial extent. However there are also application scenarios in which it is desirable to allow audio objects that comprise more than only one audio channel, exhibiting to a certain degree pair-wise (de)correlation. The simplest and probably most important case out of these is represented by *stereo objects*, i.e. objects consisting of two more or less correlated channels that belong together. As an example, such an object could represent the spatial image produced by a symphony orchestra.

In order to smoothly integrate stereo objects into a mono audio object based system as it is described above, both channels of a stereo object are treated as individual objects. The interrelationship of both part objects is reflected by an additional cross-correlation parameter which is calculated based on the same time/frequency grid as is applied for the derivation of the sub-band power values σ_i^2. In other words: A stereo object is defined by a set of parameter triplets $\{\sigma_i^2, \sigma_j^2, ICC_{i,j}\}$ per time/frequency tile, where $ICC_{i,j}$ denotes the pair-wise correlation between the two realizations of one object. These two realizations are denoted by individual objects i and j. having a pair-wise correlation $ICC_{i,j}$.

For the correct rendering of stereo objects an SAOC decoder must provide means for establishing the correct correlation between those playback channels that participate in the rendering of the stereo object, such that the contribution of that stereo object to the respective channels exhibits a correlation as claimed by the corresponding $ICC_{i,j}$ parameter. An SAOC to MPEG Surround transcoder which is capable of handling stereo objects, in turn, must derive ICC parameters for the OTT boxes that are involved in reproducing the related playback signals, such that the amount of decorrelation between the output channels of the MPEG Surround decoder fulfills this condition.

In order to do so, compared to the example given in the previous section of this document, the calculation of the powers $p_{0,1}$ and $p_{0,2}$ and the cross-power R_0 have to be changed. Assuming the indices of the two audio objects that together build a stereo object to be i_1 and i_2 the formulas change in the following manner:

$$R_0 = \sum_i \left(\sum_j ICC_{i,j} \cdot w_{1,i} w_{2,j} \sigma_i \sigma_j \right),$$

$$p_{0,1}^2 = \sum_i \left(\sum_j w_{1,i} w_{1,j} \sigma_i \sigma_j ICC_{i,j} \right),$$
$$p_{0,2}^2 = \sum_i \left(\sum_j w_{2,i} w_{2,j} \sigma_i \sigma_j ICC_{i,j} \right).$$

It can be observed easily that in case of $ICC_{i_1,i_2} = 0 \ \forall \ i_1 \neq i_2$ and $ICC_{i_1,i_2} = 1$ otherwise, these equations are identical to those given in the previous section.

Having the capability of using stereo objects has the obvious advantage, that the reproduction quality of the spatial audio scene can be significantly enhanced, when audio sources other than point sources can be treated appropriately. Furthermore, the generation of a spatial audio scene may be performed more efficiently, when one has the capability of using premixed stereo signals, which are widely available for a great number of audio objects.

The following considerations will furthermore show that the inventive concept allows for the integration of point-like sources, which have an "inherent" diffuseness. Instead of objects representing point sources, as in the previous examples, one or more objects may also be regarded as spatially 'diffuse'. The amount of diffuseness can be characterized by an object-related cross-correlation parameter $ICC_{i,i}$. For $ICC_{i,i}=1$, the object i represents a point source, while for $ICC_{i,i}=0$, the object is maximally diffuse. The object-dependent diffuseness can be integrated in the equations given above by filling in the correct $ICC_{i,i}$ values.

When stereo objects are utilized, the derivation of the weighting factors of the matrix M has to be adapted. However, the adaptation can be performed without inventive skill, as for the handling of stereo objects, two azimuth positions (representing the azimuth values of the left and

the right "edge" of the stereo object) are converted into rendering matrix elements.

As already mentioned, regardless of the type of audio objects used, the rendering Matrix elements are generally defined individually for different time/frequency tiles and do in general differ from each other. A variation over time may, for example, reflect a user interaction, through which the panning angles and gain values for every individual object may be arbitrarily altered over time. A variation over frequency allows for different features influencing the spatial perception of the audio scene, as, for example, equalization.

Implementing the inventive concept using a multi-channel parameter transformer allows for a number of completely new, previously not feasible, applications. As, in a general sense, the functionality of SAOC can be characterized as efficient coding and interactive rendering of audio objects, numerous applications requiring interactive audio can benefit from the inventive concept, i.e. the implementation of an inventive multi-channel parameter transformer or an inventive method for a multi-channel parameter transformation.

As an example, completely new interactive teleconferencing scenarios become feasible. Current telecommunication infrastructures (telephone, teleconferencing etc.) are monophonic. That is, classical object audio coding cannot be applied, since this requires the transmission of one elementary stream per audio object to be transmitted. However, these conventional transmission channels can be extended in their functionality by introducing SAOC with a single down-mix channel. Telecommunication terminals equipped with an SAOC extension, that is mainly with a multi-channel parameter transformer or an inventive object parameter transcoder, are able to pick up several sound sources (objects)and mix them into a single monophonic

down-mix signal which is transmitted in a compatible way by using the existing coders (for example speech coders). The side information (spatial audio object parameters or object parameters) may be conveyed in a hidden, backwards compatible way. While such advanced terminals produce an output object stream containing several audio objects, the legacy terminals will reproduce the downmix signal. Conversely, the output produced by legacy terminals (i.e. a downmix signal only) will be considered by SAOC transcoders as a single audio object.

The principle is illustrated in Fig. 6a. At a first teleconferencing site 200, A objects (talkers) may be present, whereas at a second teleconferencing site 202 B objects (talkers) may be present. According to SAOC, object parameters can be transmitted from the first teleconferencing site 200 together with an associated down-mix signal 204, whereas a down-mix signal 206 can be transmitted from the second teleconferencing site 202 to the first teleconferencing site 200, associated by audio object parameters for each of the B objects at the second teleconferencing site 202. This has the tremendous advantage, that the output of multiple talkers can be transmitted using only one single down-mix channel and that furthermore, additional talkers may be emphasized at the receiving site, as the additional audio object parameters, associated to the individual talkers, are transmitted in association with the down-mix signal.

This allows, for example, a user to emphasize one specific talker of interest by applying object-related gain values g_i, thus making the remaining talkers nearly inaudible. This would not be possible when using conventional multi-channel audio techniques, since these would try to reproduce the original spatial audio scene as naturally as possible, without the possibility of allowing a user interaction to emphasize selected audio objects.

Fig. 6b illustrates a more complex scenario, in which teleconferencing is performed among three teleconferencing sites 200, 202 and 208. Since each site is only capable of receiving and sending one audio signal, the infrastructure uses so-called multi-point control units MCU 210. Each site 200, 202 and 208 is connected to the MCU 210. From each site to the MCU 210, a single upstream contains the signal from the site. The downstream for each site is a mix of the signals of all other sites, possibly excluding the site's own signal (the so-called "N-1 signal").

According to the previously discussed concept and the inventive parameter transcoders, the SAOC bitstream format supports the ability to combine two or more object streams, i.e. two streams having a down-mix channel and associated audio object parameters into a single stream in a computationally efficient way, i.e. in a way not requiring a preceding full reconstruction of the spatial audio scene of the sending site. Such a combination is supported without decoding/re-encoding of the objects according to the present invention. Such a spatial audio object coding scenario is particularly attractive when using low delay MPEG communication coders, such as, for example low delay AAC.

Another field of interest for the inventive concept is interactive audio for gaming and the like. Due to its low computational complexity and independency from a particular rendering set-up, SAOC is ideally suited to represent sound for interactive audio, such as gaming applications. The audio could furthermore be rendered depending on the capabilities of the output terminal. As an example, a user/player could directly influence the rendering/mixing of the current audio scene. Moving around in a virtual scene is reflected by an adaptation of the rendering parameters. Using a flexible set of SAOC sequences/bitstreams would enable the reproduction of a non-linear game story controlled by user interaction.

According to a further embodiment of the present invention, inventive SAOC coding is applied within a multi-player game, in which a user interacts with other players in the same virtual world/scene. For each user, the video and audio scene is based on his position and orientation in the virtual world and rendered accordingly on his local terminal. General game parameters and specific user data (position, individual audio; chat etc.) is exchanged between the different players using a common game server. With legacy techniques, every individual audio source not available by default on each client gaming device (particularly user chat, special audio effects) in a game scene has to be encoded and sent to each player of the game scene as an individual audio stream. Using SAOC, the relevant audio stream for each player can easily be composed/combined on the game server, be transmitted as a single audio stream to the player (containing all relevant objects) and rendered at the correct spatial position for each audio object (= other game players' audio).

According to a further embodiment of the present invention, SAOC is used to play back object soundtracks with a control similar to that of a multi-channel mixing desk using the possibility to adjust relative level, spatial position and audibility of instruments according to the listener's liking. Such, a user can:

- suppress/attenuate certain instruments for playing along (Karaoke type of applications)
- modify the original mix to reflect their preference (e.g. more drums and less strings for a dance party or less drums and more vocals for relaxation music)
- choose between different vocal tracks (female lead vocal via male lead vocal) according to their preference.

As the above examples have shown, the application of the inventive concept opens the field for a wide variety of new, previously unfeasible applications. These applications become possible, when using an inventive multi-channel parameter transformer of Fig. 7 or when implementing a method for generating a coherence parameter indicating a correlation between a first and a second audio signal and a level parameter, as shown in Fig. 8.

Fig. 7 shows a further embodiment of the present invention. The multi-channel parameter transformer 300 comprises an object parameter provider 302 for providing object parameters for at least one audio object associated to a down-mix channel generated using an object audio signal which is associated to the audio object. The multi-channel parameter transformer 300 furthermore comprises a parameter generator 304 for deriving a coherence parameter and a level parameter, the coherence parameter indicating a correlation between a first and a second audio signal of a representation of a multi-channel audio signal associated to a multi-channel loudspeaker configuration and the level parameter indicating an energy relation between the audio signals. The multi-channel parameters are generated using the object parameters and additional loudspeaker parameters, indicating a location of loudspeakers of the multi-channel loudspeaker configuration to be used for playback.

Fig. 8 shows an example of the implementation of an inventive method for generating a coherence parameter indicating a correlation between a first and a second audio signal of a representation of a multi-channel audio signal associated to a multi-channel loudspeaker configuration and for generating a level parameter indicating an energy relation between the audio signals. In a providing step 310, object parameters for at least one audio object associated to a down-mix channel generated using an object

audio signal associated to the audio object, the object parameters comprising a direction parameter indicating the location of the audio object and an energy parameter indicating an energy of the object audio signal are provided.

In a transformation step 312, the coherence parameter and the level parameter are derived combining the direction parameter and the energy parameter with additional loudspeaker parameters indicating a location of loudspeakers of the multi-channel loudspeaker configuration intended to be used for playback.

Further embodiments comprise an object parameter transcoder for generating a coherence parameter indicating a correlation between two audio signals of a representation of a multi-channel audio signal associated to a multi-channel loudspeaker configuration and for generating a level parameter indicating an energy relation between the two audio signals based on a spatial audio object coded bit stream. This device includes a bit stream decomposer for extracting a down-mix channel and associated object parameters from the spatial audio object coded bit stream and a multi-channel parameter transformer as described before.

Alternatively or additionally, the object parameter transcoder comprises a multi-channel bit stream generator for combining the down-mix channel, the coherence parameter and the level parameter to derive the multi-channel representation of the multi-channel signal or an output interface for directly outputting the level parameter and the coherence parameter without any quantization and/or entropy encoding.

Another object parameter transcoder has an output interface is further operative to output the down mix channel in association with the coherence parameter and the level parameter or has a storage interface connected to the output interface for storing the level parameter and the coherence parameter on a storage medium.

Furthermore, the object parameter transcoder has a multi-channel parameter transformer as described before, which is operative to derive multiple coherence parameter and level parameter pairs for different pairs of audio signals representing different loudspeakers of the multi-channel loudspeaker configuration.

Depending on certain implementation requirements of the inventive methods, the inventive methods can be implemented in hardware or in software. The implementation can be performed using a digital storage medium, in particular a disk, DVD or a CD having electronically readable control signals stored thereon, which cooperate with a programmable computer system such that the inventive methods are performed. Generally, the present invention is, therefore, a computer program product with a program code stored on a machine readable carrier, the program code being operative for performing the inventive methods when the computer program product runs on a computer. In other words, the inventive methods are, therefore, a computer program having a program code for performing at least one of the inventive methods when the computer program runs on a computer.

While the foregoing has been particularly shown and described with reference to particular embodiments thereof, it will be understood by those skilled in the art that various other changes in the form and details may be made without departing from the spirit and scope thereof. It is to be understood that various changes may be made in

adapting to different embodiments without departing from the broader concepts disclosed herein and comprehended by the claims that follow.

5

What is claimed:

1. Multi-channel parameter transformer for generating a level parameter indicating an energy relation between a first audio signal and a second audio signal of a representation of a multi-channel spatial audio signal, comprising:

an object parameter provider for providing object parameters for a plurality of audio objects associated to a down-mix channel depending on the object audio signals associated to the audio objects, the object parameters comprising an energy parameter for each audio object indicating an energy information of the object audio signal; and

a parameter generator for deriving the level parameter by combining the energy parameters and object rendering parameters related to a rendering configuration.

2. Multi-channel parameter transformer in accordance with claim 1, which is adapted to additionally generate a coherence parameter indicating a correlation between a first and a second audio signal of a representation of a multi-channel audio signal, and in which the parameter generator is adapted to derive the coherence parameter based on the object rendering parameters and the energy parameter.

3. Multi-channel parameter transformer in accordance with claim 1, in which the object rendering parameters depend on object location parameters indicating a location of the audio object.

4. Multi-channel parameter transformer in accordance with claim 1, in which the rendering configuration comprises a multi-channel loudspeaker configuration,

and in which the object rendering parameters depend on loudspeaker parameters indicating locations of loudspeakers of the multi-channel loudspeaker configuration.

5. Multi-channel parameter transformer in accordance with claim 1, in which the object parameter provider is operative to provide object parameters additionally comprising a direction parameter indicating a location of the object with respect to a listening position; and

in which the parameter generator is operative to use object rendering parameters depending on loudspeaker parameters indicating locations of loudspeakers with respect to the listening position and on the direction parameter.

6. Multi-channel parameter transformer in accordance with claim 1, in which the object parameter provider is operative to receive user input object parameters additionally comprising a direction parameter indicating a user-selected location of the object with respect to a listening position within the loudspeaker configuration; and

in which the parameter generator is operative to use the object rendering parameters depending on loudspeaker parameters indicating locations of loudspeakers with respect to the listening position and on the user input direction parameter.

7. Multi-channel parameter transformer in accordance with claim 4, in which the object parameter provider and the parameter generator are operative to use a direction parameter indicating an angle within a reference plane, the reference plane comprising the

listening position and also comprising the loudspeakers having locations indicated by the loudspeaker parameters.

8. Multi-channel parameter transformer in accordance with claim 1, in which the parameter generator is adapted to use first and second weighting parameters as object rendering parameters, which indicate a portion of the energy of the object audio signal to be distributed to a first and a second loudspeaker of the multi-channel loudspeaker configuration, the first and second weighting parameters depending on loudspeaker parameters indicating a location of loudspeakers of the multi-channel loudspeaker configuration such that the weighting parameters are unequal to zero when the loudspeaker parameters indicate that the first and the second loudspeakers are among the loudspeakers having minimum distance with respect to a location of the audio object.

9. Multi-channel parameter transformer in accordance with claim 8, in which the parameter generator is adapted to use weighting parameters indicating a greater portion of the energy of the audio signal for the first loudspeaker when the loudspeaker parameters indicate a lower distance between the first loudspeaker and the location of the audio object than between the second loudspeaker and the location of the audio object.

10. Multi-channel parameter transformer in accordance with claim 8, in which the parameter generator comprises:

a weighting factor generator for providing the first and the second weighting parameters w_1 and w_2 depending on loudspeaker parameters Θ_1 and Θ_2 for the first and second loudspeakers and on a direction

parameter α of the audio object, wherein the loudspeaker parameters Θ_1, Θ_2 and the direction parameter α indicate a direction of the location of the loudspeakers and of the audio object with respect to a listening position.

11. Multi-channel parameter transformer in accordance with claim 10, in which the weighting factor generator is operative to provide the weighting parameters w_1 and w_2 such that the following equations are satisfied:

$$\frac{\tan\left(\frac{1}{2}(\Theta_1+\Theta_2)\right)-\alpha}{\tan\left(\frac{1}{2}(\Theta_2-\Theta_1)\right)}=\frac{w_1-w_2}{w_1+w_2} \quad ; \text{ and}$$

$$\sqrt[p]{w_1^p+w_2^p}=1; \text{ wherein}$$

p is an optional panning rule parameter which is set to reflect room acoustic properties of a reproduction system/room, and is defined as $1 \le p \le 2$.

12. Multi-channel parameter transformer in accordance with claim 10, in which the weighting factor generator is operative to additionally scale the weighting parameters by applying a common multiplicative gain value associated to the audio object.

13. Multi-channel parameter transformer in accordance with claim 1, in which the parameter generator is operative to derive the level parameter or the coherence parameter based on a first power estimate $p_{k,1}$ associated to a first audio signal, wherein the first audio signal being intended for a loudspeaker or being a virtual signal representing a group of loudspeaker

signals and on a second power estimate $p_{k,2}$ associated to a second audio signal, the second audio signal being intended for a different loudspeaker or being a virtual signal representing a different group of loudspeaker signals, wherein the first power estimate $p_{k,1}$ of the first audio signal depends on the energy parameters and weighting parameters associated to the first audio signal, and wherein the second power estimate $p_{k,2}$ associated to the second audio signal depends on the energy parameters and weighting parameters associated to the second audio signal, wherein k is an integer indicating a pair of a plurality of pairs of different first and second signals, and wherein the weighting parameters depend on the object rendering parameters.

14. Multi-channel parameter transformer in accordance with claim 13, in which the parameter generator is operative to calculate the level parameter or the coherence parameter for k pairs of different first and second audio signals, and in which the first and second power estimates $p_{k,1}$ and $p_{k,2}$ associated to the first and second audio signals are based on the following equations, depending on the energy parameters σ_i^2, on weighting parameters $w_{1,j}$ associated to the first audio signal and on weighting parameters $w_{2,j}$ associated to the second audio signal:

$$p_{k,1} = \sum_i w_{1,i}^2 \sigma_i^2$$

$$p_{k,2} = \sum_i w_{2,i}^2 \sigma_i^2 ,$$

wherein i is an index indicating an audio object of the plurality of audio objects, and wherein k is an integer indicating a pair of a plurality of pairs of different first and second signals.

15. Multi-channel parameter transformer in accordance with claim 14, in which k is equal to zero, in which the first audio signal is a virtual signal and represents a group including a left front channel, a right front channel, a center channel and an lfe channel, and in which the second audio signal is a virtual signal and represents a group including a left surround channel and a right surround channel, or

in which k is equal to one, in which the first audio signal is a virtual signal and represents a group including a left front channel and a right front channel, and in which the second audio signal is a virtual signal and represents a group including a center channel and an lfe channel, or

in which k is equal to two, in which the first audio signal is a loudspeaker signal for the left surround channel and in which the second audio signal is a loudspeaker signal for the right surround channel, or

in which k is equal to three, in which the first audio signal is a loudspeaker signal for the left front channel and in which the second audio signal is a loudspeaker signal for the right front channel, or

in which k is equal to four, in which the first audio signal is a loudspeaker signal for the center channel

and in which the second audio signal is a loudspeaker signal for the low frequency enhancement channel, and

wherein the weighting parameters for the first audio signal or the second audio signal are derived by combining object rendering parameters associated to the channels represented by the first audio signal or the second audio signal.

16. Multi-channel parameter transformer in accordance with claim 14, in which k is equal to zero, in which the first audio signal is a virtual signal and represents a group including a left front channel, a left surround channel, a right front channel, and a right surround channel, and in which the second audio signal is a virtual signal and represents a group including a center channel and a low frequency enhancement channel, or

in which k is equal to one, in which the first audio signal is a virtual signal and represents a group including a left front channel and a left surround channel, and in which the second audio signal is a virtual signal and represents a group including a right front channel and a right surround channel, or

in which k is equal to two, in which the first audio signal is a loudspeaker signal for the center channel and in which the second audio signal is a loudspeaker signal for the low frequency enhancement channel, or

in which k is equal to three, in which the first audio signal is a loudspeaker signal for the left front

channel and in which the second audio signal is a loudspeaker signal for the left surround channel, or

in which k is equal to four, in which the first audio signal is a loudspeaker signal for the right front channel and in which the second audio signal is a loudspeaker signal for the right surround channel, and

wherein the weighting parameters for the first audio signal or the second audio signal are derived by combining object rendering parameters associated to the channels represented by the first audio signal or the second audio signal.

17. Multi-channel parameter transformer in accordance with claim 13, in which the parameter generator is adapted to derive the level parameter CLD_k based on the following equation:

$$CLD_k = 10 \log_{10}\left(\frac{p_{k,1}^2}{p_{k,2}^2}\right).$$

18. Multi-channel parameter transformer in accordance with claim 13, in which the parameter generator is adapted to derive the coherence parameter based on a cross power estimation R_k associated to the first and the second audio signals depending on the energy parameters σ_i^2 and on the weighting parameters w_1 associated to the first audio signal and the weighting parameters w_2 associated to the second audio signal, wherein i is an index indicating an audio object of the plurality of audio objects.

19. Multi-channel parameter transformer in accordance with claim 18, in which the parameter generator is adapted to use or derive the cross power estimation R_k based on the following equation:

$$R_k = \sum_i w_{1,i} w_{2,i} \sigma_i^2 .$$

20. Multi-channel parameter transformer in accordance with claim 18, in which the parameter generator is operative to derive the coherence parameter ICC based on the following equation:

$$ICC_k = \frac{R_k}{p_{k,1} p_{k,2}} .$$

21. Multi-channel parameter transformer in accordance with claim 1, in which the parameter provider is adapted to provide, for each audio object and for each or a plurality of frequency bands, an energy parameter, and

wherein the parameter generator is operative calculate the level parameter or the coherence parameter for each of the frequency bands.

22. Multi-channel parameter transformer in accordance with claim 1, in which the parameter generator is operative to use different object rendering parameters for different time-portions of the object audio signal.

23. Multi-channel parameter transformer in accordance with claim 8, in which the weighting factor generator is operative to derive, for each audio object i, the weighting factors $w_{r,i}$ for the r-th loudspeaker depending on object direction parameters α_i and loudspeaker parameters Θ_r based on the following equations:

for an index s' ($1 \le s' \le M$) with

$$\theta_{s'} \le \alpha_i \le \theta_{s'+1} \left(\theta_{M+1} := \theta_1 + 2\pi\right)$$

$$\frac{\tan\left(\frac{1}{2}\left(\theta_{s'} + \theta_{s'+1}\right) - \alpha\right)}{\tan\left(\frac{1}{2}\left(\theta_{s'+1} - \theta_{s'}\right)\right)} = \frac{v_{1,i} - v_{2,i}}{v_{1,i} + v_{2,i}} \quad ; \quad \sqrt[p]{v_{1,i}^p + v_{2,i}^p} = 1 \quad ; \quad 1 \le p \le 2$$

$$w_{r,i} = \begin{cases} \sqrt{g_i} \cdot v_{1,i} \text{ for } s = s' \\ \sqrt{g_i} \cdot v_{2,i} \text{ for } s = s'+1 \\ 0 \text{ otherwise} \end{cases}.$$

24. Multi-channel parameter transformer in accordance with claim 8, in which the object parameter provider is adapted to provide parameters for a stereo object, the stereo object having a first stereo sub-object and a second stereo sub-object, the energy parameters having a first energy parameter for the first sub-object of the stereo audio object a second energy parameter for the second sub-object of the stereo audio object and a stereo correlation parameter, the stereo correlation parameter indicating a correlation between the sub-objects of the stereo object; and

in which the parameter generator is operative to derive the coherence parameter or the level parameter by additionally using the second energy parameter and the stereo correlation parameter.

25. Multi-channel parameter transformer in accordance with claim 24, in which the parameter generator is operative to derive the level parameter and the coherence parameter based on a power estimation $p_{0,1}$ associated to the first audio signal and a power estimation $p_{0,2}$ associated to the second audio signal and a cross power correlation R_0, using the first energy parameter σ_i^2, the second energy parameter σ_j^2 and the stereo correlation parameter $ICC_{i,j}$ such, that the power estimations and the cross correlation estimation can be characterized by the following equations:

$$R_0 = \sum_i \left(\sum_j ICC_{i,j} \cdot w_{1,i} w_{2,j} \sigma_i \sigma_j \right),$$

$$p_{0,1}^2 = \sum_i \left(\sum_j w_{1,i} w_{1,j} \sigma_i \sigma_j ICC_{i,j} \right),$$

$$p_{0,2}^2 = \sum_i \left(\sum_j w_{2,i} w_{2,j} \sigma_i \sigma_j ICC_{i,j} \right).$$

26. Method for generating a level parameter indicating an energy relation between a first audio signal and a second audio signal of a representation of a multi-channel spatial audio signal, comprising:

providing object parameters for a plurality of audio objects associated to a down-mix channel depending on the object audio signals associated to the audio objects, the object parameters comprising an energy parameter for each audio object indicating an energy information of the object audio signal; and

deriving the level parameter by combining the energy parameters and object rendering parameters related to a rendering configuration.

27. Computer program having a program code for performing, when running on a computer, a method for generating a level parameter indicating an energy relation between a first audio signal and a second audio signal of a representation of a multi-channel spatial audio signal, comprising: providing object parameters for a plurality of audio objects associated to a down-mix channel depending on the object audio signals associated to the audio objects, the object parameters comprising an energy parameter for each audio object indicating an energy information of the object audio signal; and deriving the level parameter by combining the energy parameters and object rendering parameters related to a rendering configuration.

FIG 1A

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FIG 1B

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FIG 2

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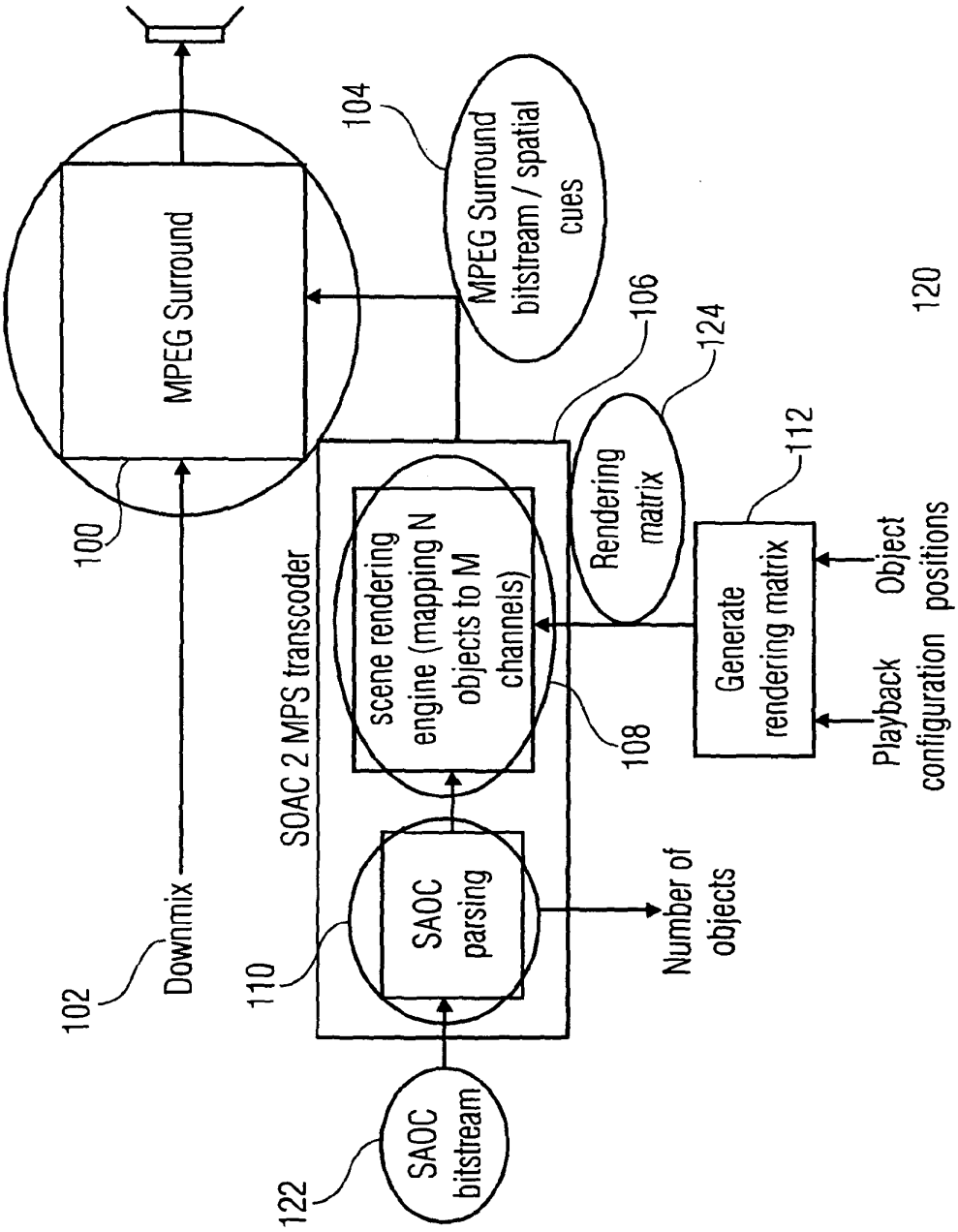

MPEG Surround
100
MPEG Surround bitstream / spatial cues
104
106
124
120
Rendering matrix
112
SOAC 2 MPS transcoder
scene rendering engine (mapping N objects to M channels)
108
Generate rendering matrix
Playback configuration
Object positions
Downmix
102
110
SAOC parsing
Number of objects
SAOC bitstream
122

FIG 3

FIG 4

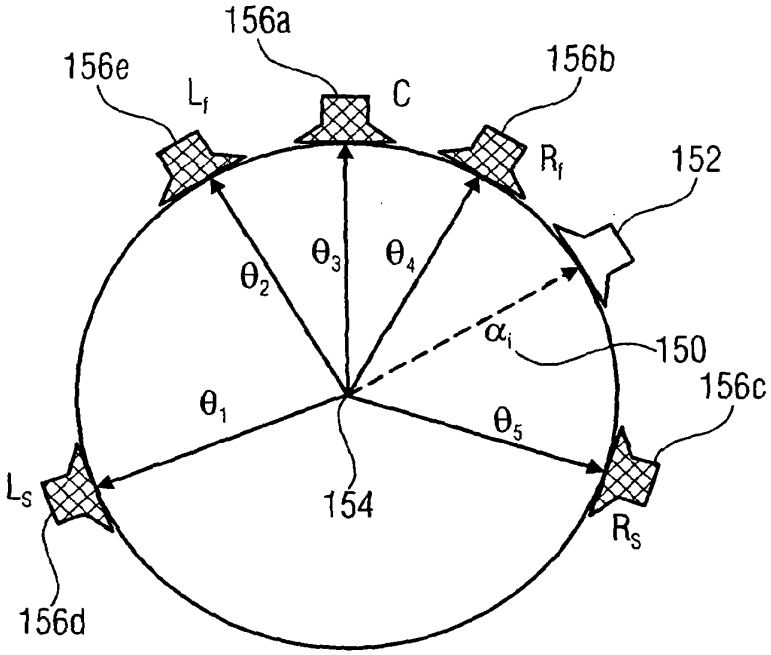
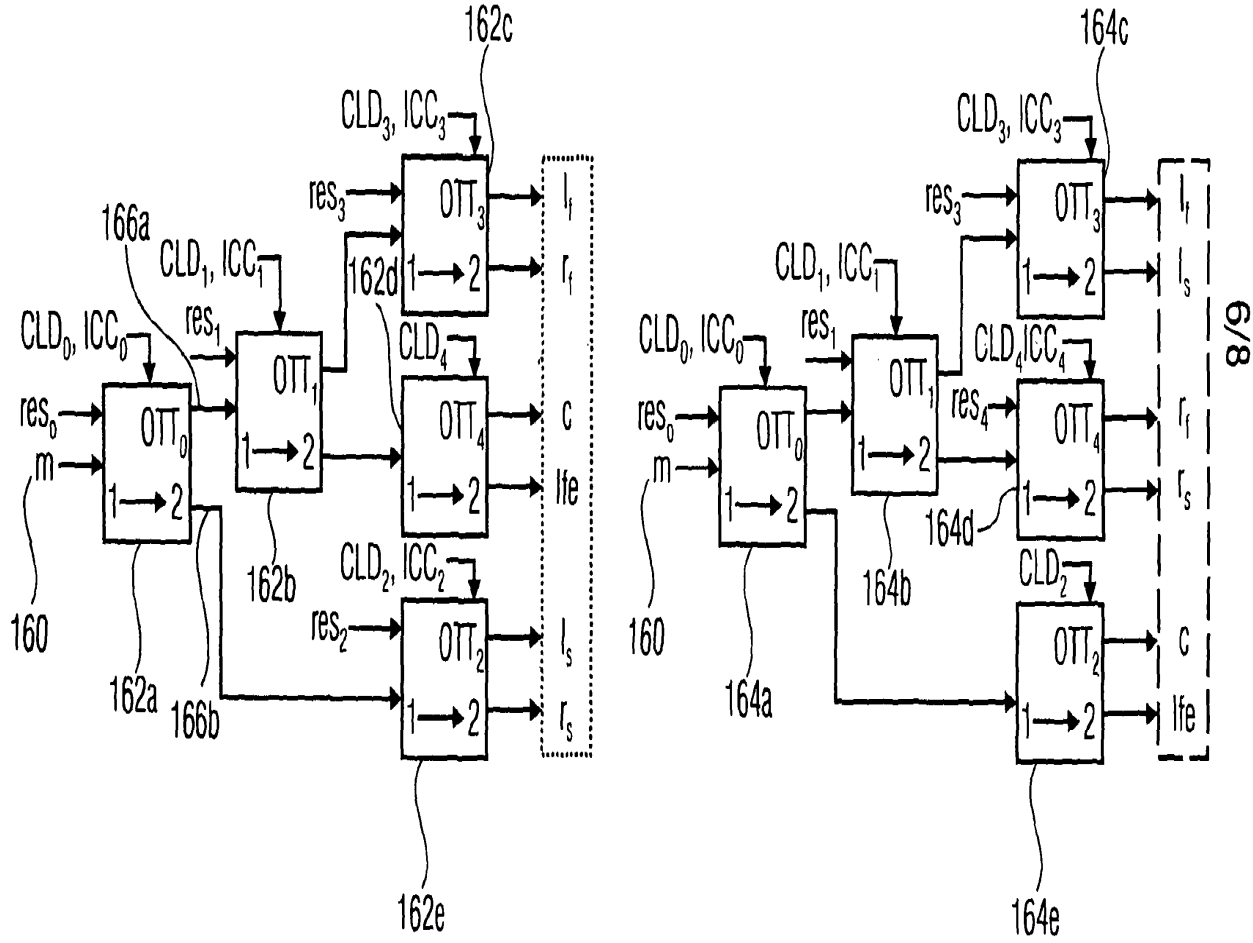

156a
156e
L_f
C
156b
R_f
152
θ_2
θ_3
θ_4
α_i
150
156c
θ_1
θ_5
L_S
154
R_S
156d

FIG 5



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FIG 6A

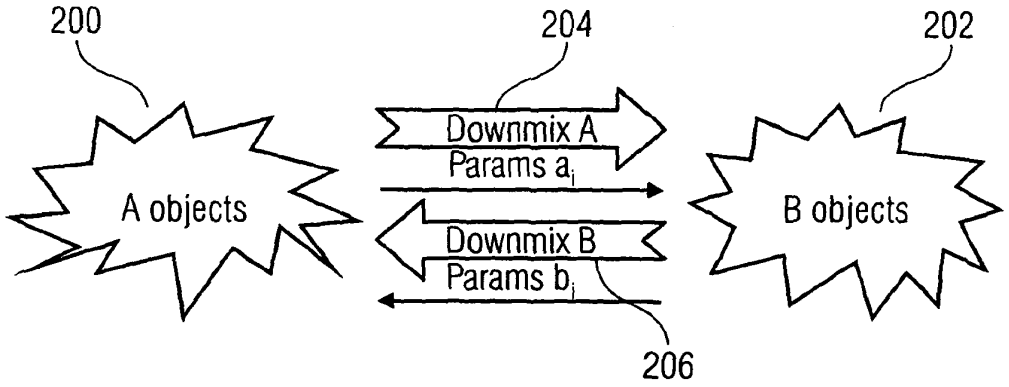

200
204
202
Downmix A
Params a_i
A objects
B objects
Downmix B
Params b_i
206

FIG 6B

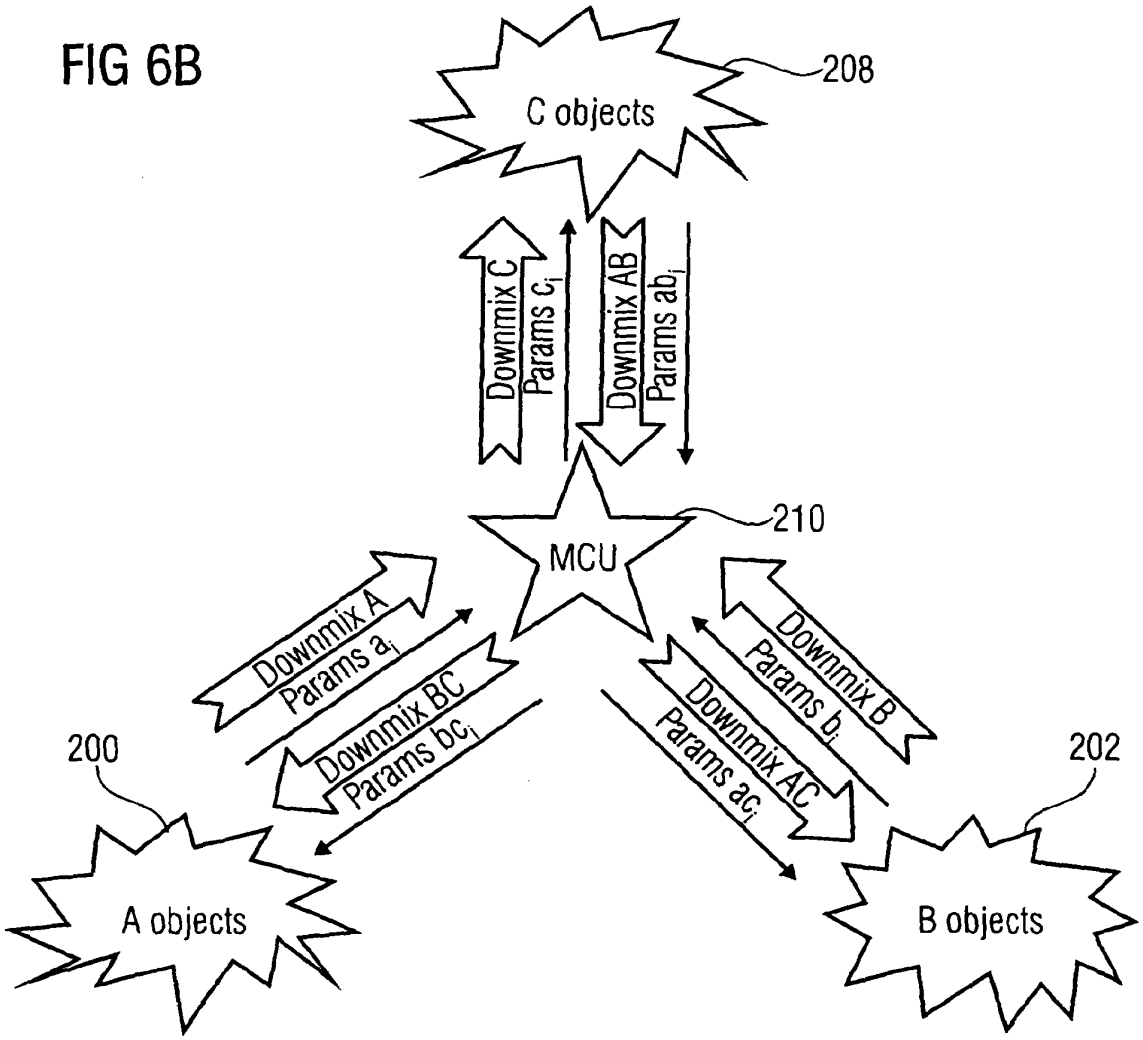

C objects
208
Downmix C
Params c_i
Downmix AB
Params ab_i
MCU
210
Downmix A
Params a_i
Downmix BC
Params bc_i
Downmix B
Params b_i
Downmix AC
Params ac_i
200
202
A objects
B objects

FIG 7

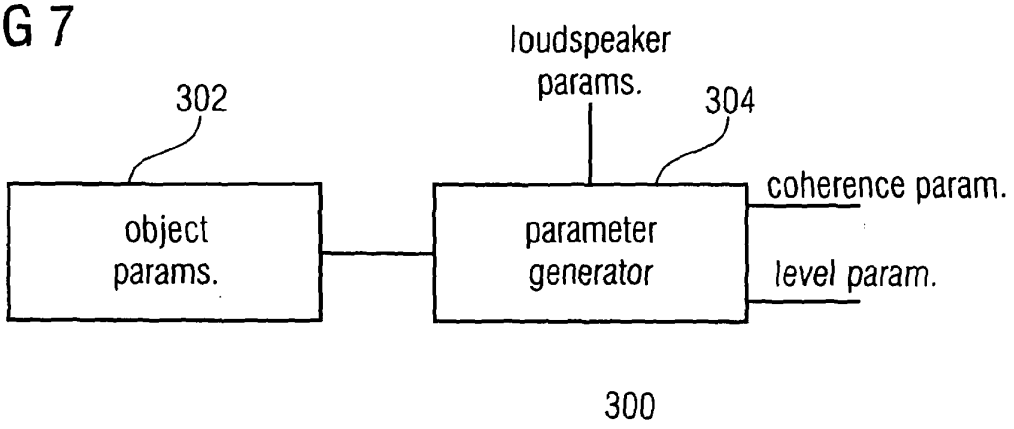
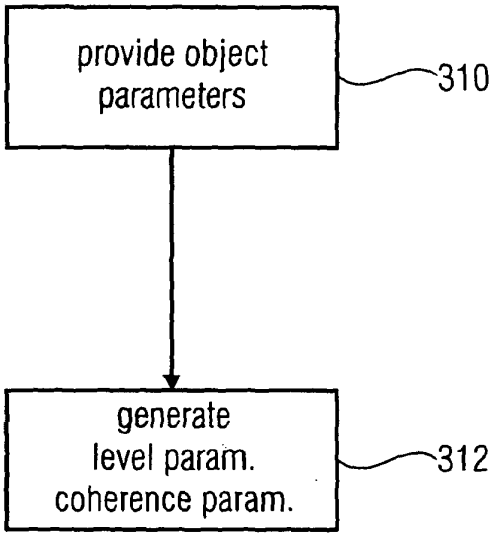

loudspeaker
params.
302
304
object
params.
parameter
generator
coherence param.
level param.
300

FIG 8


provide object
parameters
310
generate
level param.
coherence param.
312

Bibliographic data

Title:	DEVICE FOR CONTROLLING OUTPUT POWER OF SPEAKERS
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Pub/Issue Date:	2003-02-06
Inventor(s):	CHO KAP HOON[KR]|CHO KAP HOON
Applicant(s):	CHO KAP HOON[KR]
Classification:	H04R5/02AI; H04H20/61AI; H04R5/04AI
Application number:	KR20030002238 2003-01-08
Priority number:	KR20030002238 2003-01-08;

Abstract of KR20030011128A

PURPOSE: A device for controlling output power of speakers is provided to simultaneously control speakers separately, collectively or wholly, in buildings equipped with the speakers for notifying contents of lectures or public notices partly or wholly such as schools, institutes, government and public offices, and office buildings. CONSTITUTION: A control unit(10) controls at least one amplifier and at least one speaker(30) for outputting signals transmitted from the at least one amplifier. An amplifier connection part(50) is connected to an amplifier part(50) having the at least one amplifier operated according to a control operating signal of the control unit(10). An MSE(Multi Speaker Exchanger)(20) controls the wiring state between the speaker(30) and the amplifier connection part(50), to output at least one output signal transmitted through the amplifier connection part(50) via the at least one speaker(30) according to the control operating signal of the control unit(10). And the second control unit(12) outputs control operating commands simultaneously with the control unit(10) through a hub(40).

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(54) 스피커의 출력제어장치

요약

본 발명은 스피커의 출력제어장치에 관한 것으로서, 더욱 구체적으로는 학교, 학원, 관공서, 빌딩 등과 같이 전체 또는 부분적으로 강의 또는 공지사항들을 전달하기 위하여 다수의 스피커들을 구비한 건물에서 각각의 스피커들을 개별적, 집단적 또는 전체적으로 제어할 수 있는 스피커의 출력제어장치에 관한 것이다.

상기한 본 발명의 스피커의 출력제어장치는, 적어도 하나 이상의 앰프와 상기 적어도 하나 이상의 앰프로부터 전송되는 신호를 출력하기 위한 적어도 하나 이상의 스피커(30)를 제어하기 위한 제어수단(10)과, 상기 제어수단(10)의 제어구동신호에 따라서 작동되는 적어도 하나 이상의 앰프를 구비한 앰프부(52)와 연결되는 앰프접속부(50)와, 상기 제어수단(10)의 제어구동신호에 따라서 상기 앰프접속부(50)를 통하여 전송되는 적어도 하나 이상의 출력신호를 상기 적어도 하나 이상의 스피커(30)를 통하여 출력하도록 스피커(30)와 앰프접속부(50)간의 배선상태를 제어하기 위한 스피커출력변환기(20)를 포함하는 것을 특징으로 한다. 본 발명의 다른 특징에 의하면 허브(40)를 이용하여 별도의 제2제어수단(12)을 추가하여 제어수단(10)과 동시에 다수의 스피커(30)들을 제어할 수 있다.

대표도

도 2

색인어
스피커, 다중, 출력, 제어, 시스템

명세서

도면의 간단한 설명

도 1은 종래 사용되는 스피커출력장치의 개략적인 개념도,

도 2는 본 발명에 의한 스피커의 출력제어장치의 개략적인 개념도,

도 3은 본 발명에 의한 스피커출력변환기의 블럭구성도,

도 4는 하나의 스피커의 결선상태를 도시한 배선도,

도 5는 본 발명에 의한 제어부의 블럭구성도,

도 6 및 도 7은 스피커제어를 위한 표시화면의 일실시예.

※도면의 주요부분에 대한 부호의 설명※

10, 12 : 제어수단 20 : 스피커출력변환기

22 : 구동부1 24, 24a, 24b : 절환접속부

26 : 접속단자부 30 : 스피커

40 : 허브 50 : 앰프접속부

52 : 앰프부 100 : 마이크

101 : 제어부 102 : 입력부

103 : 표시부 104 : 신호변환부

105 : 메모리부 200 : 앰프

242 : 스피커 접속단자 및 제어용작동부

244 : 온/오프작동부 300 : 스피커

400: 스피커선택기

발명의 상세한 설명

발명의 목적

발명이 속하는 기술 및 그 분야의 종래기술

본 발명은 스피커의 출력제어장치에 관한 것으로서, 더욱 구체적으로는 학교, 학원, 관공서, 빌딩 등과 같이 전체 또는 부분적으로 강의 또는 공지사항들을 전달하기 위하여 다수의 스피커들을 구비한 건물에서 각각의 스피커들을 개별적, 집단적 또는 전체적으로 제어할 수 있는 스피커의 출력제어장치에 관한 것이다.

학교, 학원, 관공서, 오피스 빌딩 등과 같은 대형건물에서는 강의나 공지사항의 전달을 위하여 각각 설치된 스피커들과 상기 스피커들을 구동시키기 위한 앰프를 구비하고 있다. 도 1은 종래 스피커 출력장치의 개념도로서, 학교의 방송실에 설치된 것으로 가정한다.

도시된 바와 같이, 방송실에 구비된 앰프(200)에 연결된 마이크(100)를 통하여 사용자가 음성방송을 하면, 앰프(200)(도시되지 않았지만 다수의 앰프를 병렬로 동시에 연결할 수 있다)와 스피커 선택기(400)에 연결된 다수의 스피커(300)를 통하여 동시 또는 개별적, 그룹으로 음성이 출력된다. 이 때 스피커(300)들은 다수대의 앰프(200)에 스피커선택기(400)의 선택에 의하여 연결되어 전체 학급 또는 개별, 그룹으로 강의실 또는 교실에 방송을 한다. 그러나 학교의 경우에는 매년 학년과 반을 재편성하여, 학년과 반이 변경되기 때문에 학년과 반을 맞출 수가 없는 문제점이 노출되었다.

또한 상기 앰프(200)와 스피커선택기(400), 스피커(300)는 일단 설치되면 배선의 변경이 매우 어렵기 때문에 직접 설치한 시공자에게 전적으로 의존하여야 하며 수리비용이 많이 소요된다. 이러한 사용상의 한계점으로 인하여 학년의 바뀜 또는 임대 건물의 임차인이 바뀜으로 인하여 다양한 내용의 정보(학습정보, 공지사항)를 사용자가 맨처음의 사용목적에 맞추어 제어하기 어려운 문제점이 있었다.

또한, 멀티미디어방송이 대중화되고 있으며, 각 학급마다 별도의 내용을 방송하여야 할 필요성이 점차 대두되고 있는 형편이다. 따라서 좀더 지능적이고 용이하게 제어가 가능하며 저렴한 비용으로 설치가 가능한 스피커의 출력제어장치가 요구되고 있다. 물론 이러한 스피커 출력관리의 필요성은 학교뿐만 아니라, 학원, 고층의 임대건물에도 모두 적용되는 문제점이다.

발명이 이루고자 하는 기술적 과제

본 발명은 상기한 문제점을 해결하기 위한 것으로서, 본 발명의 목적은 학교, 학원, 관공서, 오피스 빌딩 등과 같이 전체 또는 부분적으로 강의 또는 공지사항들을 전달하기 위하여 다수의 스피커들을 구비한 건물에서 각각의 스피커들을 개별적, 집단적, 또는 전체적으로 동시에 제어할 수 있는 스피커의 출력제어장치를 제공하는데 있다.

본 발명의 다른 목적은 사용자가 용이하게 앰프와 그것에 연결된 스피커(들)의 출력상태를 제어할 수 있으므로 작동상의 효율성이 제고되는 스피커의 출력제어장치를 제공하는데 있다.

상기와 같은 본 발명의 스피커의 출력제어장치는, 다수의 스피커의 출력을 제어하기 위한 장치에 있어서, 적어도 하나 이상의 앰프와 상기 적어도 하나 이상의 앰프로부터 전송되는 신호를 출력하기 위한 적어도 하나 이상의 스피커(30)를 제어하기 위한 제어수단(10)과, 상기 제어수단(10)의 제어구동신호에 따라서 작동되는 적어도 하나 이상의 앰프를 구비한 앰프부(52)와 연결되는 앰프접속부(50)와, 상기 제어수단(10)의 제어구동신호에 따라서 상기 앰프접속부(50)를 통하여 전송되는 적어도 하나 이상의 출력신호를 상기 적어도 하나 이상의 스피커(30)를 통하여 출력하도록 스피커(30)와 앰프접속부(50) 간치 배선상태를 제어하기 위한 스피커출력변환기(20)를 포함하는 것을 특징으로 한다.

본 발명의 다른 특징에 의하면 허브를 이용하여 별도의 제2제어수단을 추가하여 제어수단과 동시에 스피커와 앰프를 동시에 제어할 수 있으며, 상기 제어수단, 제2제어수단은 개인용 컴퓨터를 이용하여 구성할 수 있다.

본 발명의 또 다른 특징에 의하면 개인용 컴퓨터를 이용한 제어수단측에서 음향소스(마이크, 녹음/재생기,CD롬 재생기, 기타음향기기)를 직접 공급할 수 있다.

발명의 구성 및 작용

이하 첨부된 도면을 참고하여 본 발명의 스피커의 출력제어장치를 상세히 설명하면 다음과 같다.

도 2는 본 발명에 의한 스피커의 출력제어장치의 개념도이다.

도시된 바와 같이, 통상의 개인용 컴퓨터를 이용하여 구성되는 제어수단(10)과, 상기 제어수단(10)으로부터 출력되는 제어구동신호를 전송하기 위한 허브(40)와, 상기 제어수단(10)로부터 출력되는 제어구동신호에 따라서 그것에 연결된 다수의 스피커(30)의 출력상태를 개별적, 그룹적 또는 전체적으로 제어하기 위한 스피커출력변환기(20)와, 상기 제어수단(10)로부터 출력되는 앰프 제어구동신호에 따라서 작동되는 앰프부(52)에 설치된 앰프(미도시됨)를 통하여 음성신호를 증폭하여 상기 스피커출력변환기(20)로 전송하는 앰프접속부(50)를 구비하고 있다.

또한 본 발명의 스피커의 출력제어장치에는 상기 제어수단(10)과 병렬 연결되어 동시에 다수의 스피커(30)를 제어할 수 있는 제2제어수단(12)을 추가로 연결할 수 있다. 상기 제어수단(10)과 제2제어수단(12)은 허브(40)를 통하여 신호의 충돌없이 제어구동신호를 전송한다. 제2제어수단(12)의 작동상태는 본질적으로 제어수단(10)과 동일하므로 제2제어수단(12)에 대한 상세한 설명은 생략한다. 다만 제2제어수단(12)을 구동하기 위해서는 별도의 구동용 SOFTWARE가 필요함은 명백하다.

상기 제어수단(10)은 모니터와 같은 출력화면 표시부와, 명령 또는 제어신호를 입력하기 위한 것으로 키보드 또는 마우스와 같은 입력부와, 제어프로그램을 내장하고 실행하기 위한 제어부와, 상기 제어부로부터 출력되는 신호를 소정의 포맷으로 변환하여 출력하기 위한 신호변환부를 포함한다. 상기 제어수단(10)은 또한 종래 사용되는 개인용 컴퓨터를 이용하여 구성할 수 있으며, 앰프접속부(50)에 할당된 앰프(앰프부(52)에 설치됨)의 설정, 스피커(30)들의 출력설정 및 동작명령의 입력등과 같은 기능을 수행한다.

또한 제어수단(10)과 제2제어수단(12)은 마이크를 이용하여 음성신호를 입력시키거나, 제어수단들에 구비된 CD-ROM, DVD등을 통하여 재생되는 음향신호를 앰프부(52)로 출력시킬 수 있다.

도 5에 도시된 것은 제어수단(10)의 일실시예의 블럭구성도이다.

도시된 바와 같이, 제어부(101)와, 입력부(102)와, 표시부(103)와, 신호변환부(104)와, 메모리부(105)를 포함하고 있다. 상기 제어부(101)는 본 발명의 스피커의 출력제어장치를 제어하기 위한 것으로서, 메모리부(105)에 저장되어 있는 제어프로그램과 작동데이터를 이용하여 제어동작을 수행한다. 제어부(101)는 마이크로 프로세서를 이용하여 구성된다.

입력부(102)는 스피커 및 앰프의 제어구동명령을 입력하기 위한 것으로서, 키보드를 이용하거나 또는 도 7에 표시된 것과 같이 표시부(103)의 모니터화면상에 표시된 아이콘들을 작동시킬 수 있는 마우스를 이용하여 구성할 수 있다.

또한 표시부(103)는 각각의 스피커의 작동상태를 화면에 표시하며, 또한 앰프의 설정 또는 스피커의 작동명령입력을 위한 화면을 표시한다. 앰프의 설정상태는 도 6을 참고하면, 본 발명에 의한 스피커의 출력제어장치에 연결되는 각각의 앰프들을 표시하고, 도면에는 아무 것도 표시되지 않았지만, 하부에 표시된 빈 상자안에 앰프를 통하여 출력되기 위한

오디오소스를 연결시킨다. 소스는 예를 들어서 마이크, 녹음/재생기, CD롬 재생기 또는 기타 음향기기 등과 같은 오디오장치가 될 수 있다.

도 7에 표시된 아이콘들을 마우스를 이용하여 눌러주면 해당 교실에 설치된 스피커의 작동명령이 입력된다. 작동명령이 입력된 아이콘은 색상을 비작동상태의 아이콘과 다른 것으로 변화시켜 표시할 수 있다. 또한 앰프의 볼륨과 앰프의 선택을 위한 아이콘이 하부에 표시되어 있다. 상기와 같이 제어수단(10)에서는 각 앰프와 각 스피커들을 개별적으로 제어하는 것이 가능하다.

상기 제어수단(10)으로부터 출력되는 제어구동신호에 따라서 앰프접속부(50)에 연결되는 각각의 앰프(앰프부(52)에 포함됨)가 개별적 또는 집단적으로 작동되고, 또한 앰프접속부(50)로부터의 신호출력용 인출선(A1,A2,A3,A4,A5)과 연계된 스피커출력변환기(20)의 회로가 작동(다수의 온/오프작동부에 의하여 작동됨)되어서 결과적으로 다수의 스피커(30)의 출력이 제어된다. 즉 필요에 따라서 회로의 온/오프 상태를 제어하여 출력회로를 구성한다.

상기 스피커(30)는 필요한 숫자만큼 추가하거나 제거할 수 있으며 앰프접속부(50)에 연결되는 앰프들도 마찬가지이다. 앰프와 스피커의 추가는 단순한 배선의 변경에 의하여 이루어지며, 충분한 인출선을 확보하면 별도의 배선변경 없이도 스피커(30)의 출력상태를 사용자가 임의로 조정할 수 있다.

상기 허브(40)는 제어수단(10 또는 12)으로부터 출력되는 제어구동신호를 앰프접속부(50)와 앰프부(50)와, 스피커출력변환기(20)로 전송하기 위한 것이다. 허브(40)를 사용하여 네트워을 구성함으로서 별도의 장치 없이 제어수단을 용이하게 더 추가할 수 있다. 이것은 허브(40)의 입/출력접속단자에 의존하며 제어수단(10 또는 12)과 허브(40)와의 연결을 위하여 전용 케이블을 이용할 수 있다.

상기 스피커출력변환기(20)는 제어수단(10 또는 12)으로부터 입력되는 제어구동신호에 따라서 내부에 설치된 온/오프작동부(244)를 제어하여 스피커(30)를 통하여 앰프의 전송신호가 출력되도록 제어한다.

도 3에는 상기 스피커출력변환기(20)와 앰프접속부(50)의 블럭구성도가 표시되어 있다. 도시된 바와 같이 스피커출력변화기(20)는 앰프접속부(50)에 구비되어 있는 적어도 하나 이상의 앰프접속단자(AMP접속1, APM접속2, AMP접속3, AMP접속4, AMP접속5)와 접속하여 앰프부(50)에 포함되어 있는 각각의 앰프들로부터 연장되는 인출선(A1,A2, A3,A4,A5)을 골고루 분배하기 위한 접속단자부(26)와, 상기 접속단자부(26)로부터 인출되는 각각의 앰프(설명의 편의를 위하여 5개의 앰프AMP1, AMP2, APM3, AMP4, AMP5를 포함한다고 가정함)들과 연결된 다수의 인출선(A1, A2,A3,A4,A5)과 다수의 스피커(30)들의 상호접속상태 즉 회로구분, 분리를 제어하는 절환접속부(24)와, 상기 절환접속부(24)의 접속상태를 제어하여 스피커(30)를 통하여 출력되는 신호를 설정하기 위한 제어구동신호에 의하여 작동되는 구동부1(22)을 포함하고 있다. 도면에서는 5개의 앰프가 표시되어 있으며, 앰프의 숫자의 증가에 따라서 인출선(A1,A2,A3,A4,A5)의 숫자가 증가한다.

실제 절환접속부(24a,24b)에 스피커(30)와 구동부1(22)이 더 연결되어 있으나 도면에서는 설명의 편의를 위하여 생략하였다. 또한 절환접속부(24a,24b)의 작동상태는 절환접속부1(24)과 구동부1(22)과 스피커(30)의 연결에 의한 작동상태와 본질적으로 동일하기 때문에 역시 생략한다.

제어수단(10)으로부터 입력되는 앰프제어 구동신호에 의하여 앰프접속부(50)에 연결되는 앰프중의 하나 또는 다수 개가 작동된다. 앰프접속부(50)에 연결된 앰프부(52)에 포함된 앰프들(AMP1, APM2, AMP3, AMP4, AMP5)로부터 연장된 신호 출력선은 접속단자부(26)에 의하여 동일한 신호를 출력하는 인출선(A1,A2,A3,A4,A5)으로 동시에 각 절환접속부2,3(24a,24b)로 출력되도록 배선된다. 인출선(A1, A2, A3, A4, A5)들은 각각의 앰프들에 1 : 1 대응된다. 절환접속부2,3(24a, 24b)도 동일하게 적용된다.

상기와 같이 앰프접속부(50)에 연결된 작동앰프(예를 들어 AMP1 이라고 가정함)를 구동시킨 후에 관리자는 상기 작동앰프의 출력상태를 어느 스피커를 통하여 출력시킬 것인 가를 결정한 후에 제어수단(10)을 통하여 해당 스피커가 작동앰프의 출력신호와 연결되도록 제어구동신호를 구동부1(22)에 출력시킨다. 구동부1(22)에서는 입력되는 스피커 제어구동신호에 따라서 특정 스피커를 온 연결시켜서 작동앰프로부터 음성신호를 출력시킨다.

이러한 작용을 수행하기 위하여서 도면에서는 절환접속부1(24)을 3개의 부분으로 분리시켰지만 실제로는 하나의 절환접속부를 이용하여 실행할 수 있음은 명백하며, 분리의 이유는 장치를 모듈화 시킴으로서 회로의 증감과 스피커의 제어상태를 용이하게 설계하도록 하는 이점을 주기 위한 것이다. 각각의 앰프와 다수의 스피커(30)를 연결하기 위한 절환접속부1(22)의 배선상태가 도 4에 표시되어 있다. 또한 각 앰프들에는 예를 들어서 마이크나 오디오 테이프로부터 출력되는 소스신호가 연결되어있다고 가정한다. 따라서 앰프를 작동시키면 연결된 소스에 의한 음성신호가 출력된다.

도 4에 도시된 것은 하나의 스피커(30)에 대한 배선상태로서 각각의 스피커(30)들은 모두 동일한 배선상태를 가진다. 도시된 바와 같이, 앰프접속부(50)로부터 연장된 전선과 연결되어 있는 인출선(A1,A2,A3,A4,A5)이 통과하고 있으며, 각각의 인출선으로부터 스피커(30)로 접점 연결되어 있으며, 그 사이에 온/오프 작동부(244)가 각각 설치되어 있다. 상기 온/오프 작동부(244)는 온/오프 구동신호에 의하여 작동되어서 인출선과 스피커 사이의 접점을 개폐한다. 미설명 부호 242는 스피커접속단자 및 제어용 작동부(242)로 각각의 온/오프 작동부(244)로부터 선택출력되는 음성신호를 스피커(30)와 연결하기 위한 것이다.

상기 온/오프 구동신호는 구동부1(22)로부터 출력되는 신호로서, 구동부1(22)은 제어수단(10)으로부터의 제어신호에 따라서 각각의 온/오프 작동부(244)를 온/오프 제어하는 것이다. 이렇게 함으로서 제어수단(10)을 통하여 각각의 스피커(30)를 통하여 출력되는 음성신호를 제어할 수 있다.

예를 들어서 제어수단(10)에서 앰프부(52)의 앰프1(AMP1)을 작동시키면 인출선(A1)을 통하여 음성신호가 출력된다. 이 때 제어수단(10)에서 스피커(30)와 인출선(A1) 사이에 설치된 온/오프 작동부(244)와 스피커 접속단자 및 제어용작동부(242)를 온 제어하면 전선이 연결됨으로서 인출선(A1)을 통하여 출력되는 음성신호가 스피커(30)를 통하여 출력되는 것이다.

이 때 나머지 앰프(AMP2- AMP5)들의 신호는 오프상태이기 때문에 스피커(30)를 통하여 출력되지 않는다. 하나의 앰프가 아니라 2개 또는 3개의 앰프를 동시에 온으로 제어한 상태에서도 역시 스피커(30)들을 통하여 출력의 제어가 가능하다.

예를 들어서 앰프1, 앰프2(AMP1,AMP2)가 온 되도록 제어신호를 출력하면 인출선(A1,A2)을 통하여 음성신호가 출력된다. 이 때 스피커(30)의 제어구동신호를 출력하지 않음으로서 어느 스피커에서도 음성이 출력되지 않는다. 이러한 상태에서 관리자는 제어수단(10)을 이용하여 특정 스피커가 작동되도록 온/오프 작동부(244)와 스피커접속단자 및 제어용 작동부(242)를 온 제어하는 제어구동신호를 출력한다. 출력된 신호에 의하여 온/오프 작동부(244)와 스피커접속단자 및 제어용 작동부(242)가 작동되면, 작동된 온/오프 작동부(244)와 스피커접속단자 및 제어용 작동부(242)에 의하여 연결되는 인출선(A1 또는 A2)을 통하여 전송되는 신호가 스피커(30)를 통하여 출력된다. 상기와 같이 하여 각각의 스피커들의 개별적인 제어가 가능하다. 이것을 학교에 적용하면, 각 반에 하나의 스피커를 설치하고 각 교실에 출력되는 음성신호를 제어할 수 있는 것이다.

또한 본 발명에 의한 스피커의 출력제어장치는 학년별, 주제별, 교과별로 각 교실을 그룹화(예를 들어서, 1학년 전체학급을 1그룹, 2학년 전체학급을 2그룹, 3학년 전체 학급을 3그룹) 시키고, 1그룹에 특정 앰프로부터 출력되는 신호를 출력하도록 제어신호를 입력하면, 해당앰프와 연결된 인출선과 접속되어 있는 온/오프 작동부(244)를 동시에 온 작동시

킴으로서 동일한 음성신호를 출력할 수 있는 것이다. 이러한 스피커제어구성은 학교뿐만 아니라 학원, 빌딩, 아파트 등과 같은 집단적 건물에 모두 적용될 수 있다.

또한 전체제어를 위한 제어신호를 입력하면, 해당 앰프와 연결된 인출선과 접속되어 있는 온/오프 작동부(244)와 스피커접속단자 및 제어용 작동부(242)를 동시에 온 작동시킴으로서 역시 동일한 음성의 출력이 가능하다. 상기 온/오프 작동부(244)와 스피커접속단자 및 제어용 작동부(242)는 온/오프 절환이 가능한 릴레이를 이용하여 구성하거나 또는 트랜지스터의 온/오프 기능을 이용하여 구성할 수 있다. 전자의 경우에는 후자에 비하여 부피가 커지는 단점이 있다.

발명의 효과

이와 같은 본 발명에 의하면 학교, 학원, 관공서, 오피스 빌딩 등과 같이 전체 또는 부분적으로 강의 또는 공지사항들을 전달하기 위하여 다수의 스피커들을 구비한 건물에서 각각의 스피커들을 개별적, 집단적, 또는 전체적으로 제어할 수 있으며, 작동상의 효율성이 제고되는 효과가 있다.

(57) 청구의 범위

청구항 1.

다수의 스피커의 출력을 제어하기 위한 장치에 있어서,

적어도 하나 이상의 앰프와 상기 적어도 하나 이상의 앰프로부터 전송되는 신호를 출력하기 위한 적어도 하나 이상의 스피커(30)를 제어하기 위한 제어수단(10)과, 상기 제어수단(10)의 제어구동신호에 따라서 작동되는 적어도 하나 이상의 앰프를 구비한 앰프부(52)와 연결되는 앰프접속부(50)와, 상기 제어수단(10)의 제어구동신호에 따라서 상기 앰프접속부(50)를 통하여 전송되는 적어도 하나 이상의 출력신호를 상기 적어도 하나 이상의 스피커(30)를 통하여 출력하도록 스피커(30)와 앰프접속부(50)간의 배선상태를 제어하기 위한 스피커출력변환기(20)를 포함하는 것을 특징으로 하는 스피커의 출력제어장치.

청구항 2.

제1항에 있어서,

상기 스피커의 출력제어장치가 제2제어수단(12)을 더 포함하며, 허브(40)를 통하여 제어수단(10)과 동시에 제어구동명령을 출력하는 것을 특징으로 하는 스피커의 출력제어장치.

청구항 3.

제1항에 있어서,

상기 스피커출력변환기(20)가 앰프접속부(50)에 구비되어 있는 적어도 하나 이상의 앰프접속단자(AMP접속1, APM접속2, AMP접속3, AMP접속4, AMP접속5)와 접속하여 각 앰프들로부터 연장되는 인출선(A1,A2,A3,A4,A5)을 골고루 분배하기 위한 접속단자부(26)와, 상기 접속단자부(26)로부터 인출되는 각각의 앰프들과 연결된 다수의 인출선(A1,A2,A3,A4,A5)과 다수의 스피커(30)들의 상호접속상태를 제어하는 절환접속부(24)와, 상기 절환접속부(24)의 접속상태를 제어하여 스피커(30)를 통하여 출력되는 신호를 설정하기 위한 제어구동신호에 의하여 작동되는 구동부(22)를 포함하는 것을 특징으로 하는 스피커의 출력제어장치.

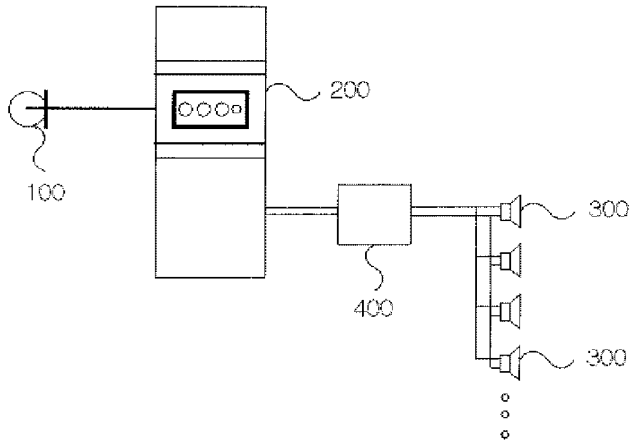
청구항 4.

제3항에 있어서,

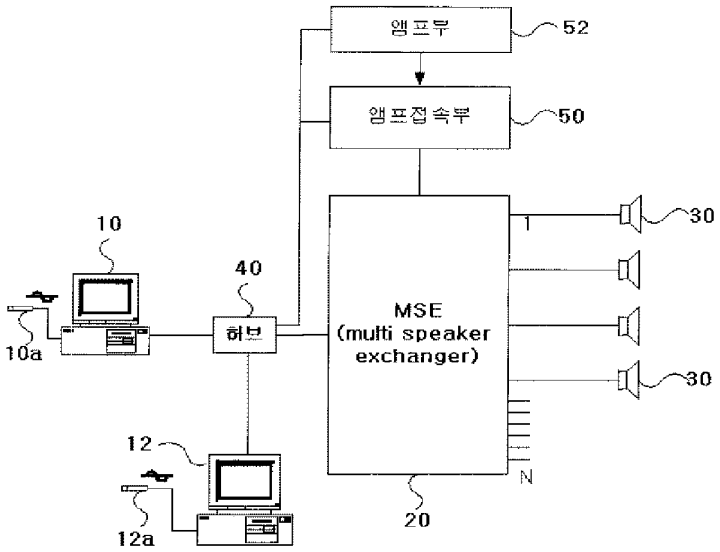
상기 절환접속부(24)가 앰프접속부(50)로부터 연장된 전선과 연결되어 있는 인출선(A1,A2,A3,A4,A5)이 통과하며 릴레이 또는 트랜지스터 스위치로 구성되는 온/오프 작동부(244)와, 상기 각각의 온/오프작동부(244)로부터 연장된 각각의 인출선들을 스피커(30)와 연결하는 스피커접속단자 및 제어용 작동부(242)를 포함하는 것을 특징으로 하는 스피커의 출력제어장치.

도면

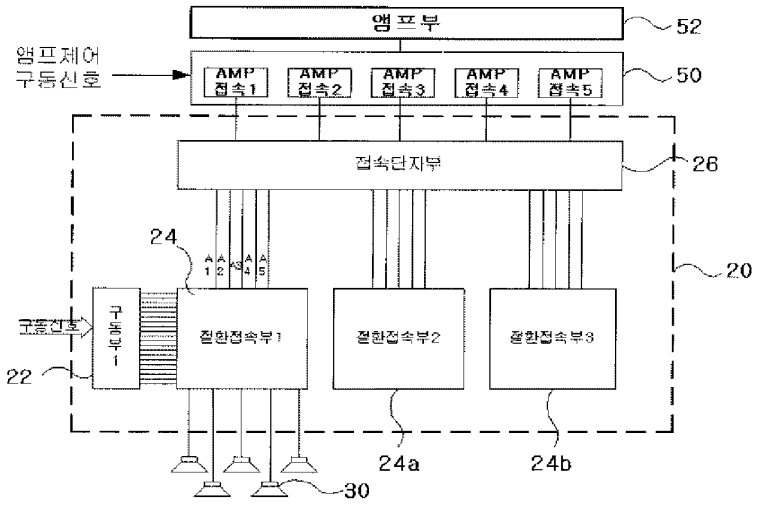
도면 1



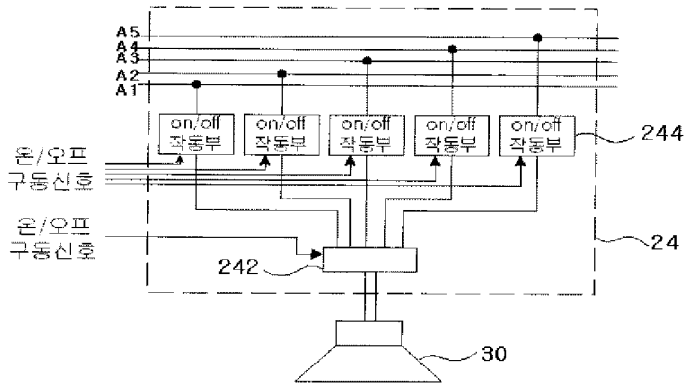
도면 2


앰프부
52
앰프접속부
50
10
40
30
1
10a
허브
MSE
(multi speaker
exchanger)
30
12
N
12a
20

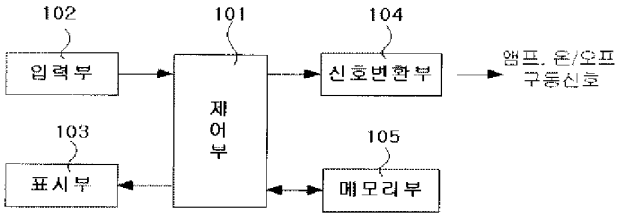
도면 3


앰프부
52
앰프제어
구동신호
AMP
접속1
AMP
접속2
AMP
접속3
AMP
접속4
AMP
접속5
50
접속단자부
26
24
20
구동신호
구동부1
절환접속부1
절환접속부2
절환접속부3
22
24a
24b
30

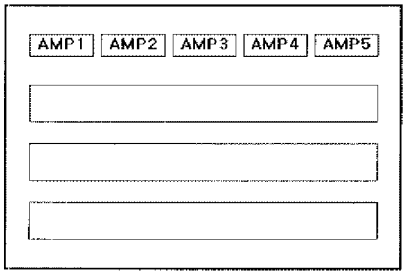
도면 4


A5
A4
A3
A2
A1
on/off 작동부
on/off 작동부
on/off 작동부
on/off 작동부
on/off 작동부
244
온/오프 구동신호
온/오프 구동신호
242
24
30

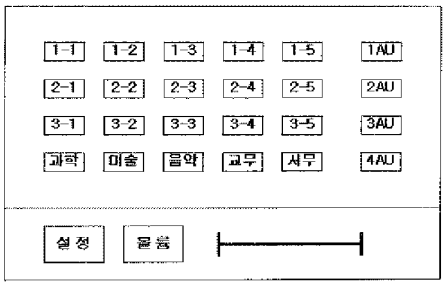
도면 5


102
101
104
입력부
제어부
신호변환부
앰프, 온/오프 구동신호
103
105
표시부
메모리부

도면 6


AMP1
AMP2
AMP3
AMP4
AMP5

도면 7


1-1
1-2
1-3
1-4
1-5
1AU
2-1
2-2
2-3
2-4
2-5
2AU
3-1
3-2
3-3
3-4
3-5
3AU
과학
미술
음악
교무
서무
4AU
설정
볼륨

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

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	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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	Attorney Docket Number	11-0401-CON1019A

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Examiner Signature		Date Considered	

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	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

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(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	2654
Examiner Name	MCCORD, PAUL C
Attorney Docket Number	11-0401-CON1019A

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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.

6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Doc code: IDS
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	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

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	1	Carnoy, David. Parrot DS1120 Wireless Hi-Fi Speaker System Review, 15 July 2008, 4 pages.	
	2	Case et al. RFC 1157 - A Simple Network Management Protocol, May 1990, 36 pages.	
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	7	cd30 Backgrounder, 1 page [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
	8	cd30. c100 Network MP3 Player. Quick Product Summary .1 page [produced by Google in Inv. No. 337-TA-1191 on May 6, 2020].	
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	12	cd30. Careers, 21 November 2003, 1 page.	
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	16	cd30 Frequently-Asked Questions About cd30 Network MP3 Players, 12 December 2003, 6 pages.	
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	23	cd30. Multi-Player Synchronization. 15 January 2004, 4 pages.	
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	41	Cd3o. Network MP3 Player, Product Manual, 2003, 65 pages.	
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	45	Cheshire et al. Zero Configuration Networking: The Definitive Guide. December 2005, 288 pages.	
	46	Clipsal. Multi Room Audio Amplifier, User's Guide, V1.0, December 2005, 28 pages.	
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	50	Compaq et al., Universal Serial Bus Specification, Revision 2.0, 27 April 2000, 650 pages.	

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Examiner Signature		Date Considered	

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	First Named Inventor	KALLAI; Christopher
	Art Unit	2654
	Examiner Name	MCCORD, PAUL C
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Zuha S. Irfan/	Date (YYYY-MM-DD)	2020-07-23
Name/Print	Zuha S. Irfan	Registration Number	72387

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Electronic Acknowledgement Receipt

EFS ID:	40104299
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:40:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

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42	Non Patent Literature	cd30_Contact_12-12-03_1page.pdf	280133 7f94062b555497a36211abfcbfd44acccb81ba12	no	1
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43	Non Patent Literature	cd30_Corporate_Fact_Sheet_1page.pdf	471296 379c17e78c93173d7aee64d5fb852755426eaa28	no	1
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45	Non Patent Literature	cd30_FAQs_what_problem_2pages.pdf	521107 5da468c982edd2ad89edfe6eaf97b5f88286a01d	no	2
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46	Non Patent Literature	cd30_how_it_works_2-2-04_3pages.pdf	1351880 45a40416fcdf3f97bb74011dd9f08734cb798ff1	no	3
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47	Non Patent Literature	cd30_logo_1page.pdf	158775 e4884be140456421009cfe4632bb809f337f4cd1	no	1
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48	Non Patent Literature	cd30_management_12-12-03_1page.pdf	549031 1c8f4599d45c16610dcf03321357fb12de2c3d42	no	1
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49	Non Patent Literature	cd30_Network_Mp3_player_model_1page.pdf	401774 c73f3c2c2337bccea0bebfba45b63796bfab926b	no	1
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50	Non Patent Literature	cd30_network_mp3_player_03_65pages.pdf	8039167 26898b39f774256647b7b2998d84fca30caaf5dc	no	65
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53	Non Patent Literature	cd30_network_mp3_players_c100_200_300_1page.pdf	419800 1027b167fabe4917b0d11cfaf9f1e02f96858dca	no	1
Warnings:					
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54	Non Patent Literature	cd30_news_11-21-03_2pages.pdf	892831 91a341ccdd71929eeb081e9c183f9709f068d6f9	no	2
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55	Non Patent Literature	NewsRoom_Bytestechnology_2pages.pdf	1053520 f5739e55f0715f6ea244d37e9c7df72ade98747a	no	2
Warnings:					
Information:					
56	Non Patent Literature	NewsRoom_BridgeCo_Second_Financing_1-9-03_3pages.pdf	2079860 e9194ded87de471dab0df3a70a80eaf18173c90c	no	3
Warnings:					
Information:					
57	Non Patent Literature	Cheshire_Zero_Configuration_Guide_288pages_Part1.pdf	24687118 65b40959debf08dc39e61c64deeeeef9eb87a860	no	149
Warnings:					
Information:					

58	Non Patent Literature	Cheshire_Zero_Configuration_Guide_288pages_Part2.pdf	18202669 b8f6454d1f5b144e07fbb638dc21f5580982dd22	no	139
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59	Non Patent Literature	Shannon_NY_Times_Company_Supports_9-11-02_2pages.pdf	1044538 c1cdfcfad2b1053a5e712cfa8db193f3299c32db	no	2
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60	Non Patent Literature	Amazon_Cisco-Linksys_5pages.pdf	2084153 0bf01406ef4c8169cea7755fe970e9fedc105e73	no	5
Warnings:					
Information:					
		Total Files Size (in bytes):	161041604		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Acknowledgement Receipt

EFS ID:	40104266
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Zuha Irfan
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-JUL-2020
Filing Date:	31-OCT-2019
Time Stamp:	14:40:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Non Patent Literature	NewsRoom_Sonic_divide_9-2-01_3pages.pdf	1320491 700e2fc5cf625caf1feb826ed0c93debe7eca469	no	3

Warnings:

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2	Non Patent Literature	Yamaha_MusicCAST_MCX-1000_148pages.pdf	21377527 b60dead27d29a871715b39033709890ff0f27edc	no	148
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3	Non Patent Literature	NewsRoom_The_Age_9-7-01_3pages.pdf	1347183 5e5392aa2b48d5ea4fff4447bea21bd19c398b27	no	3
Warnings:					
Information:					
4	Non Patent Literature	Windows_XP_Chapter_19_6pages.pdf	3831663 dfab3cfb74de46a149dc68882268cf4db391a630	no	6
Warnings:					
Information:					
5	Non Patent Literature	NewsRoom_Slim_Devices_Into_Squeezebox_11-18-03_2pages.pdf	1134478 c29e4507296d0c08344350cec4d0c26ffbffa21f	no	2
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6	Non Patent Literature	NewsRoom_Slimserver_11-18-03_2pages.pdf	1170139 1cca8a21c77d584484cadb3526aa1490c0df404f	no	2
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7	Non Patent Literature	NewsRoom_AudioPoint_9-27-02_4pages.pdf	2433383 301fec9ab209db9447b1c7e82f853caebe93ce38	no	4
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8	Non Patent Literature	Omnifi_DMS1_5pages.pdf	2237908 445698cf8f170d8b2eff7174d919dfbb41c9f8b9	no	5
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Information:					

9	Non Patent Literature	Omnifi_DMS1_7pages.pdf	3526096 20d4b4a77f32ab22938f92d6b6ac6ff08b5f0089	no	7
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10	Non Patent Literature	Omnifi_DMS1_Wifi_Media_10-20-03_7pages.pdf	2994406 b8f8e0e35ce7e4505405420cafb586be6d19325e	no	7
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11	Non Patent Literature	NewsRooms_D-Link_to_Supply_Omnifi_1-8-04_3pages.pdf	1887559 5bd132c8a371f4dd33e0185442dca9e1f168234a	no	3
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12	Non Patent Literature	Niles_SI-1260_2000_32pages.pdf	11670439 a2dee8f05a230ff14a7d855076e65ed6acb54d49	no	32
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13	Non Patent Literature	NewsRoom_Sirius_XM_9-15-03_2pages.pdf	1087911 fb572d8c43fc0c6b964c69ca659e2a8130a9161f	no	2
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14	Non Patent Literature	Netstreams_Panorama_1-1-06_64pages.pdf	11215498 660bd2bb742323e71434ced8b92dfc930adf6b8d	no	64
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15	Non Patent Literature	Netstreams_Catalog_2003-2004_20pages.pdf	9004091 896ea09b10eff977d021f5b087a239aecfae6ea5	no	20
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16	Non Patent Literature	US_Provisional_60379313_produced_5-6-20_50pages.pdf	2448406 e021c59540cae2f915781a3a6e58c1eefc72d378	no	50
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17	Non Patent Literature	Musica_MU4602_Data_Sheet_2004_2pages.pdf	1352422 d0b9514dcf563fa2efe1042631a68d787db51b3e	no	2
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18	Non Patent Literature	Bose_Owners_Guide_12-20-01_19pages.pdf	6226336 a65609e32711a3aaab8f9c80db86a8152c600d02	no	19
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19	Non Patent Literature	NewsRoom_InfoComm_5-1-04_24pages.pdf	9512811 2e18f96e630ab69e4c809a7433f5c0a5195a1d50	no	24
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20	Non Patent Literature	NewsRoom_Home_theater_systems_1-6-2000_3pages.pdf	1184509 885de374ec395856b89fd47f82ec017d5908b2c6	no	3
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22	Non Patent Literature	NewsRoom_Expo_Award_2005_11-18-05_3pages.pdf	1805561 60ce6b3f01aa2ec917775d803d0a14d1f7bb2076	no	3
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23	Non Patent Literature	C-Media_CM102-A_102S_Data_Sheet_5-21-03_20pages.pdf	5397734 eb86c069bc34d3d78fe457f2c9969e8493bc4889	no	20
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24	Non Patent Literature	Intel_Users_Manual_3-27-03_96pages.pdf	22555089 59ab6525a6947873968372a729a1e64f9d101fde	no	96
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25	Non Patent Literature	MSI_MS-6728_v1_1_ATX_Mainboard_2003_118pages.pdf	8718031 404abc4c8c4840680340cb8e153a5b40d40f0ce0	no	118
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26	Non Patent Literature	cd3o_Network_MP3_Player_Product_Manual_2003_65pages.pdf	19412511 4ec3cd0755e0e6e218f1327ce2840ce931e3e809	no	65
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27	Non Patent Literature	NewsRoom_Toys_of_Summer_9-1-03_3pages.pdf	1588372 b3d3ba8bb9b5ca986f00cc6d111dc019ad16d3fe	no	3
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28	Non Patent Literature	Crestron_Industry_Awards_2006_6pages.pdf	2209764 d90784e9166f59a1d1df293c63813108d4f60f2c	no	6
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29	Non Patent Literature	NewsRoom_AP_Technology_NewsBrief_12-26-03_2pages.pdf	850669 423d5a6e713917f59e0fb38b67f7eb7e4927696b	no	2
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30	Non Patent Literature	NewsRoom_AP_Technology_NewsBrief_12-27-03_2pages.pdf	1047474 f5121ab7fd759b4e58abe0a6bddfd34d87850190	no	2
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31	Non Patent Literature	Apple_AirPort_Express_Setup_Guide_5-20-04_51pages.pdf	7410267 3501ecc0a6f4d42e2e43dee16d2d3bcb834b8634	no	51
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32	Non Patent Literature	Apple_AirPort_Express_Setup_Guide_2004_48pages.pdf	8115892 2b7b2e63da3c74e765484a6f8ef684d62cc92f07	no	48
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33	Non Patent Literature	Apple_Open_Sources_Rendezvous_9-25-02_2pages.pdf	727369 fc735dc6957cfb79918abdcf52dbb96e6e0029f8	no	2
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34	Non Patent Literature	Apple_Ships_New_AirPort_Express_7-14-04_3pages.pdf	813745 9c0520fdbfbc4d7d515d874a974680fae29cb1b5	no	3
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35	Non Patent Literature	Apple_Unveils_Airport_Express_6-7-04_3pages.pdf	950743 9965f90ea381c8180c58f95d62eae1f5f0653c79	no	3
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36	Non Patent Literature	Bootcamp_Digital_Music_on_Your_Stereo_System_1-10-03_1page.pdf	355981 d411af5dad13f9b29ac46048d128caaec46ed0d7	no	1
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38	Non Patent Literature	CES_MP3_2003_4pages.pdf	2443864 008180204aa8f4c58882c5079bad37292241f23f	no	4
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39	Non Patent Literature	BridgeCo_Company_Overview_1page.pdf	368189 f64f5c9efa927e577458aaf2fdcabafe6cbbf662	no	1
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40	Non Patent Literature	Technology_cd30_2003_1pages.pdf	402292 9732eb3cc525fa4ddbb799e1c4abd1439b1d8528	no	1
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41	Non Patent Literature	cd30_Network_MP3_2-2-04_2pages.pdf	786467 c72b54110e29dc67d0703256cbca50b808f464ef	no	2
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43	Non Patent Literature	BridgeCo_Professional_Loudspeaker-Product_Information_3pages.pdf	976755 5a82d7bbbb0a604475a27dcdf781889e7c3cdb25	no	3
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46	Non Patent Literature	BridgeCo_Vision_1page.pdf	467101 ce1dcc59e8842db64d6c9f8b6dd873886da0d559	no	1
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48	Non Patent Literature	cd30_Product_Support_Forums_11-3-03_2pages.pdf	1013445 731d578fedd668a35126a0eec824e0ff5f1795e2	no	2
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55	Non Patent Literature	BridgeCo_Vision_ENA_Deployment_1page.pdf	312430 376d7212823bd70ca63c4ab2d751e9e300e3ac28	no	1
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58	Non Patent Literature	BridgeCo_Vision_Entertainment_Network_Adapter_1page.pdf	248149 30dca176759c1320335eee739a1806d3b9ace49d	no	1
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60	Non Patent Literature	Creston_Awards_2007_5pages.pdf	2985972 ace74fe8b688189492fe50118bd7e7af293e437c	no	5
Warnings:					
Information:					
		Total Files Size (in bytes):	210192132		

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New Applications Under 35 U.S.C. 111
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New International Application Filed with the USPTO as a Receiving Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 07/21/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
07/21/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Examiner-Initiated Interview Summary	Application No. 16/670,109	Applicant(s) Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (FITF) Status No

All participants (applicant, applicant's representative, PTO personnel):

(1) PAUL C. MCCORD. (3) ____.

(2) JEFFREY ARMSTRONG. (4) ____.

Date of Interview: 17 July 2020.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: ____.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☑ 103 ☑ Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: McCarty, Crutchfield, DME (of record).

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner called to clarify the instant rejection and the priority date assertions; Examiner believes the priority date to resolve the earliest filed NON-provisional application (patent number 8483853).

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 07/09/2020

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300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

MAIL DATE	DELIVERY MODE
07/09/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 16/670,109	Applicant(s) Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 4/27/20.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL.** 2b) ☑ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-20 is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6) ☐ Claim(s) _____ is/are allowed.

7) ☑ Claim(s) 1-20 is/are rejected.

8) ☐ Claim(s) _____ is/are objected to.

9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☑ The drawing(s) filed on 10/31/19 is/are: a)☑ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)

2) ☑ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.

4) ☐ Other: _____.

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, 365(c), or 386(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119(e) as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of 35 U.S.C. 112(a) or the first paragraph of pre-AIA 35 U.S.C. 112, except for the best mode requirement. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994)

The disclosure of the prior-filed application, Application No. 60/825407, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application. The'407 provisional application does not teach the claimed configuration of a scene of an equalization parameters based on a determined pairing based at least on a set of scene parameters including "identifiers (e.g., IP address) of the associated players and a playlist. The parameters may also include volume/tone settings for the associated players in the scene." The '407 provisional application at best teaches that once scenes are grouped equalization in the form of bass/treble sliders may be operated upon. The recitation of equalization based on pairing in claim 1 is thus considered to resolve Col 9:59-10:15 of Patent number 8483853 and is afforded a filing date of 9/11/2007.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

In the event the application names joint inventors, in considering patentability of the claims under pre-AIA 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to

the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of pre-AIA 35 U.S.C. 103(c) and potential pre-AIA 35 U.S.C. 102(e), (f) or (g) prior art under pre-AIA 35 U.S.C. 103(a).

Claims 1, 3, 5-17, 19 rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over McCarty: 7483538 hereinafter Mcc further in view of Crutchfield: 20030215097 hereinafter Crutch.

Regarding claim 1, 17, 19

Mcc teaches:

A playback device, method and medium bearing coded instructions (Mcc: Abstract: Col 9:6-9:25: audio communication system for routing; of audio across a network) comprising and/or operative of:

a network interface configured to receive audio data over a network (Mcc: Col 9:6-57, 14:58-67; Fig 1C, 2, 7, 8: system comprises an interface to send/receive audio over a local wired or wireless audio network);

one or more speaker drivers configured to output audio based on the audio data (Mcc: Col 12:15-24, 15:26-33; Fig 1C, 2, 7, 8: plurality of speaker drivers operable upon the audio network to output audio);

one or more processors; and tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to (Mcc: Col 9:6-57, 11:5-12:7; Fig 1C, 2, 7, 8: sound processing logic and/or DSP operable to process the audio signal for output)

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to pair with one or more other playback devices (Mcc: Col 9:6-57, 11:5-12:7; Fig 1C, 2, 7, 8: an available audio format directs a particular pairing of available speakers based on channel configuration and control information); and

(i) process the audio data before the playback device outputs audio from the one or more speaker drivers (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: processing logic, DSP, etc. process audio signal into particular channel configuration, equalization, volume, etc. for output),

(ii) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: type of pairing determined based upon audio format available which configures corresponding speaker number, equalization, volume, etc.),

(iii) set an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices (Mcc: Col 9:6-57, 8:21-31, 11:5-12:60; Fig 1C, 2, 7, 8: equalization parameters determined in concert with a type of pairing determined by audio format), and

Mcc determines a particular output configuration and then adjusts an equalization based thereon but does not clearly disclose a change of a first equalization to a second equalization based on pairing with a particular. Mcc is considered to strongly suggest such a change based on the disclosed relationship of the system with a subwoofer. That is, changing from the disclosed stereo configuration to any of the disclosed subwoofer inclusive pairings would mandate the inclusion of at least a low pass equalization for the subwoofer, such a

subwoofer equalization would further strongly suggests accompanying equalization for any of the speakers in a subwoofer inclusive pairing (see at least Mcc: Col 9:6-57, 8:21-31, 11:5-12:60: stereo to 2.1, 3.1 etc. configurations). Nevertheless, Mcc does not explicitly teach the recited configuration of a second equalization based on the detection of a particular pairing.

In a related field of endeavor Crutch teaches a system and method for determining and storing particular speaker configuration characteristics including equalization and filter parameters to configure speakers for particular groupings with respect to the particular configuration characteristics (Crutch: ¶ 73-79; Fig 6: groupings of speakers access and apply frequency filtering characteristics based on stored configuration data including grouping data, and filtering data, the grouping and filtering operable prior to output of filtered audio by the grouped speakers). It would have been obvious to one of ordinary skill in the art before the effective filing date of the instant application to change or adjust the Mcc taught equalization frequencies based on first, second, etc. output configuration pairings as taught or suggested by Crutch. The average skilled practitioner would have been motivated to do so for the purpose of rendering audio in concert with a substantially flat output frequency response in a particular environment and would have expected predictable results therefrom.

Regarding claim 3

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein determining that the playback device is paired with the one or more other playback devices comprises determining that the playback device is paired with two or more other playback devices (Mcc: Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: pairing comprise stereo, 2.1, 3.1 etc. comprising two or more playback devices); (Crutch: ¶ 73-79; Fig 6: various user or system directed pairings may be instantiated)

Regarding claim 5

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a stereo mode, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a theater mode (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: system operates in stereo and/or a surround type mode such as 3.1, 5.1, etc.); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 6

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers, and wherein, when the playback device is paired with the one or more other playback devices, the playback device is configured to output audio based on the audio data via the one or more speaker drivers in a consolidated mode (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: system operates in stereo and/or a surround type mode such as 3.1, 5.1, etc.); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 7

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the playback device further comprises a button that, when selected, configures the playback device to output audio comprising one channel of the audio data. Examiner takes official notice that the utility of a “mono” button was well known to the average skilled practitioner of the prior art before the effective filing date of the instant invention and would have comprised an obvious inclusion.

Regarding claim 8

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the network is a wireless network (Mcc: Abstract: system comprises wireless communication between a plurality of system elements said elements comprising wirelessly implemented speakers).

Regarding claim 9

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the one or more speaker drivers comprises a plurality of speaker drivers, and wherein the instructions, when executed by the one or more processors, further cause the playback device to: output audio from the plurality of speaker drivers. (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a plurality of speaker configurations each comprising a plurality of speaker drivers); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 10

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the signal further comprises an instruction for the playback device to play back a particular channel of the audio data (Mcc: Abstract; Col 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 11

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit audio data of at least one additional separate audio channel over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 12

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data of the at least one separate audio channel and audio data of at least one additional separate audio channel over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 13

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the playback device is further configured to (i) separate the audio data into separate audio channels, (ii) output audio based on audio data of at least one separate audio channel from the one or more speaker drivers, and (iii) transmit the audio data over the network (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: configuration data routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: various user or system directed pairings, configurations, etc. may be instantiated and thereby operate to output audio from particular channels in a designated audio configuration).

Regarding claim 14

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to separate the pair with the one or more other playback devices (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: an additional or subsequent configuration data comprising control information effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: a selection of a particular one of various user or system directed pairings, configurations, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).

Regarding claim 15

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: detect a predefined event; and interpret the detected predefined event as an instruction for the playback device to pair with the one or more other playback devices, such that pairing occurs when the predefined event is detected. (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a predefined event in the form of reading or otherwise identifying audio channel format data or configuration data comprising control information effectively routes particular channels of audio data to

each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: a predefined event comprising selection of a particular one of various user or system directed pairings, configurations, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).

Regarding claim 16

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein the instructions, when executed by the one or more processors, further cause the playback device to: receive another signal from the controller over the network, wherein the other signal comprises an instruction for the playback device to pair with a different one or more other playback devices. (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: an additional or subsequent configuration data comprising control information effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: a subsequent selection of a particular additional user or system directed pairing, configuration, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).

Claims 2, 4, 18, 20 rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over McCarty: 7483538 hereinafter Mcc further in view of Crutchfield: 20030215097 hereinafter Crutch as applied to

claims 1, 3, 5-17, 19 *supra* and further in view of Yamaha DME designer (DME designer manual copyright 2004 provided by Examiner and hereinafter DME).

Regarding claim 2, 18, 20

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein performing the first equalization comprises utilizing at least a first one or more parameters such that the playback device becomes configured to output at least a first range of audio frequencies based on the audio data from the one or more speaker drivers, wherein performing the second equalization comprises utilizing at least a second one or more parameters such that the playback device becomes configured to output at least a second range of audio frequencies based on the audio data from the one or more speaker drivers, and wherein the first range of audio frequencies and the second range of audio frequencies are different (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a selection and subsequent selection of a particular media accesses configuration data and/or subsequent configuration data comprising control information which effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying and/or equalizing particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: a selection and subsequent selection of a particular additional user or system directed pairing, configuration, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).

While Mcc and Crutch do not explicitly teach the filter/equalization parameters as comprising pass-filter parameters Examiner takes official notice that the utility of pass filters and pass filtering modules for DSP was well known to the average skilled practitioner before the effective filing date of the instant application and would have comprised an obvious inclusion.

As evidence consider DME which teaches a variety of signal processing modules, routines, code snippets, etc. operable to instantiate pass filters into a signal path (DME: pp403-417). It would have been obvious to one of ordinary skill in the art before the effective filing date of the instant application to utilize the various DME taught signal processing modules within the Mcc in view of Crutch device and method. The average skilled practitioner would have been motivated to do so for the purpose of performing user directed signal processing on an audio channel or channels and would have expected only predictable results therefrom.

Regarding claim 2, 18, 20

Mcc in view of Crutch teaches or suggests:

A playback device, method and medium, wherein, when the playback device is not paired with the one or more other playback devices, the playback device is configured to output audio comprising two channel sound via the one or more speaker drivers, and wherein, when the playback device is paired with one or more playback devices, the playback device is configured to output audio comprising no more than one channel of the two channel sound via the one or more speaker drivers (Mcc: Abstract; Col 5:1-6:5, 9:6-57, 11:5-12:60; Fig 1C, 2, 7, 8: a selection and subsequent selection of a particular media accesses configuration data and/or subsequent configuration data comprising control information which effectively routes particular channels of audio data to each/any of a plurality of speakers each comprising a plurality of speaker drivers each separately amplifying and/or equalizing particular channels of audio); (Crutch: ¶ 73-84, 108; Fig 6, 10: a selection and subsequent selection of a particular additional user or system directed pairing, configuration, etc. instantiates and operates the system to output audio from particular channels in a designated audio configuration).. While Mcc and Crutch do not explicitly teach the filter/equalization parameters as comprising pass-

filter parameters DME teaches a variety of mixer and router modules operable to perform the routings claimed (DME: pp 421-454). It would have been obvious to one of ordinary skill in the art before the effective filing date of the instant application to utilize the various DME taught signal processing modules within the Mcc in view of Crutch device and method. The average skilled practitioner would have been motivated to do so for the purpose of performing user directed routing or mixing on particular audio channel or channels for user directed output and would have expected only predictable results therefrom.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL C MCCORD whose telephone number is (571)270-3701. The examiner can normally be reached on 730-630 M-F.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on 5712727848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see https://ppair-

my.uspto.gov/pair/PrivatePair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Notice of References Cited	Application/Control No. 16/670,109	Applicant(s)/Patent Under Reexamination Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-7483538-B2	01-2009	McCarty; William A.	H04R5/04	381/77
*	B	US-20030215097-A1	11-2003	Crutchfield, William G. JR.	H04R29/001	381/61
	C					
	D					
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	F					
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	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Yamaha DME Designer Manual (Year: 2004)
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04R3/12	01/27/2020	pm
G06F3/165	01/27/2020	pm
H03G3/20,3005	01/27/2020	pm
H03G5/165	01/27/2020	pm
H04R5/04	01/27/2020	pm
H04R27/00	01/27/2020	pm
H04S7/30	01/27/2020	pm
H04R2227/003,005	01/27/2020	pm
H04R2420/01,07	01/27/2020	pm
H04S2400/01	01/27/2020	pm

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
700	94	01/27/2020	pm

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

Search Notes		
Search Notes	**Date**	**Examiner**
East text search H04R3/12	01/27/2020	pm
East text search G06F3/165	01/27/2020	pm
East text search H03G3/20,3005	01/27/2020	pm
East text search H03G5/165	01/27/2020	pm
East text search H04R5/04	01/27/2020	pm
East text search H04R27/00	01/27/2020	pm
East text search H04S7/30	01/27/2020	pm
East text search H04R2227/003,005	01/27/2020	pm
East text search H04R2420/01,07	01/27/2020	pm
East text search H04S2400/01	01/27/2020	pm
East text search 700/94	01/27/2020	pm
Inventor, Assignee name search	01/27/2020	pm
East text search CPC and USPC datasets	01/27/2020	pm
Google patent search	01/27/2020	pm
IP.com patent search	01/27/2020	pm
Double Patenting, Claims consultation Ahmad Matar	01/17/2020	pm
Double Patenting, Claims consultation Vivian Chin	01/27/2020	pm
East text search CPC and USPC datasets	07/06/2020	pm
Google patent search	07/06/2020	pm
IP.com patent search	07/06/2020	pm
Inventor, Assignee name search	07/06/2020	pm

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
please see above class search		01/27/2020	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS										
☐ Claims renumbered in the same order as presented by applicant						☐ CPA		☐ T.D.		☐ R.1.47
CLAIM		**DATE**								
Final	Original	07/06/2020								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
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	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher.
Art Unit	2654
Examiner Name	McCord, Paul C.
Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	None				

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	McCord, Paul C.
	Attorney Docket Number	11-0401-CON1019A

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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-05-21
Name/Print	Brandon J. Kennedy	Registration Number	67894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Examiner Name	Paul C. McCord
Attorney Docket Number	11-0401-CON1019A

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	1	7215649		2007-05-08	YU; Robert. et al.	
	2	9344206		2016-05-17	LAMBOURNE; Robert A.	

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	1	20030100335		2003-05-29	GASSHO; Kazuhito. et al.	
	2	20060281409		2006-12-14	LEVIEN; Royce A. et al.	
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	1	CANADIAN PATENT OFFICE, Canadian Office Action mailed on 27 January 2020, issued in connection with Canadian Application No. 3032479, 4 pages.	
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.

9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"103313" and input same future	US-PGPUB; USPAT; DERWENT	OR	ON	2019/08/31 14:46
S2	1	"103313" and input same future and supplemen$9	US-PGPUB; USPAT; DERWENT	OR	ON	2019/08/31 14:47
S3	2	("20120130806" | "20130331147").PN.	US-PGPUB; USPAT	OR	ON	2019/09/03 07:19
S4	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:26
S5	3,450	S4 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S6	1,012	S5 and insert$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S7	59	S5 and insert$4 same (commercial$5 adverti$8 promotion$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:27
S8	58	S5 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:28
S9	2	"20180054523"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 07:28
S10	4	"2006028213"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 08:29
S11	1	("20120130806" | "20130331147").PN. and future same3 respon$6	US-PGPUB; USPAT	OR	ON	2019/09/03 09:37
S12	0	("20120130806" | "20130331147").PN. and schedu$7	US-PGPUB; USPAT	OR	ON	2019/09/03 09:40
S13	1	("20120130806" | "20130331147").PN. and future same3 (plac$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 09:40
S14	1	("20120130806" | "20130331147").PN. and (time near2 period future) same3 (plac$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 09:42

S15	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S16	3,450	S15 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S17	19	S16 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:24
S18	2	"754155".ap. and mesh$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:37
S19	1	"754155".ap. and mesh$4 same3 (group$6 ray)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:38
S20	5	"754155".ap. and group$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:39
S21	1	"754155".ap. and group$4 same ray	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 10:40
S22	7,644	natural near2 language near3 understand$6 nlu	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S23	3,450	S22 and dialog$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S24	19	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S25	0	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:55
S26	48,076	(natural near2 language nlu) same (dialog$6 learn$6 processing understand$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:56
S27	49,214	(natural near2 language nlu) same (dialog$6 learn$6 processing understand$6 convers$6 UI)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:56
S28	20	S23 and insert$4 same (commercial$5 adverti$8 promotion$6) and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S29	164	S26 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58

S30	817	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and succes$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S31	168	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 12:58
S32	9	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) same (succes$5 positiv$6 negat$6 accept$6 refus$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:00
S33	7	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) and ("704" "715").clas.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:01
S34	15	S32 S33	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:02
S35	142	S27 and insert$4 same (commercial$5 adverti$8 promotion$6) and context$9 and record$5 near3 (react$6 respon$6) and dialog$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 13:11
S36	1	("20120130806" | "20130331147").PN. and (voice dialog language)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:18
S37	1	("20120130806" | "20130331147").PN. and (voice dialog$4 language)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:19
S38	2	("20120130806" | "20130331147").PN. and (voice dialog$4 language vocal speech spok$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:19
S39	1	("20190066659").PN. and (voice dialog$4 language vocal speech spok$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 13:24
S40	11	sound near3 profile and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:34
S41	5	shih.in. and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S42	199	profile and sonos.as.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S43	0	profile and sonos.as. and shih	US-PGPUB; USPAT	OR	ON	2019/09/03 15:35
S44	115	profile and sonos.as. and lan	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36
S45	4	profile and sonos.as. and lan same outside	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36
S46	50	profile and sonos.as. and wan	US-PGPUB; USPAT	OR	ON	2019/09/03 15:36

S47	0	profile and sonos.as. and wan and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:37
S48	2	profile and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:37
S49	6	profile and sonos.as. and @pd<="20131124"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:38
S50	0	"676655".ap. and profl$4	US-PGPUB; USPAT	OR	ON	2019/09/03 15:39
S51	1	"676655".ap. and profil$4	US-PGPUB; USPAT	OR	ON	2019/09/03 15:39
S52	1	"676655".ap. and profil$4 same (visual$8 display$6 interfac$4 gui ui)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:40
S53	2	"272833".ap. and profil$4 same (visual$8 display$6 interfac$4 gui ui)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:40
S54	3	profil$4 same (visual$8 display$6 interfac$4 gui ui) and sonos.as. and @pd<="20131124"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:41
S55	1	profil$4 same (visual$8 display$6 interfac$4 gui ui) and "676655".ap.	US-PGPUB; USPAT	OR	ON	2019/09/03 15:42
S56	133	korhonen.in. and (surround$4 "5.1")	US-PGPUB; USPAT	OR	ON	2019/09/03 15:42
S57	118	korhonen.in. and (surround$4)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:43
S58	18	korhonen.in. and (surround$4) and audio and channel$6	US-PGPUB; USPAT	OR	ON	2019/09/03 15:43
S59	63	("2008/0045140").URPN.	USPAT	OR	ON	2019/09/03 15:44
S60	0	equaliz$6 and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:45
S61	1	(equaliz$6 eq auto$8eq) and sonos.as. and @pd<="20101013"	US-PGPUB; USPAT	OR	ON	2019/09/03 15:46
S62	41	id3$4 same (eq equali$8)	US-PGPUB; USPAT	OR	ON	2019/09/03 15:46
S63	3	("20060087941" | "20060089736" | "7539551").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2019/09/03 15:48
S64	148	baudino.in.	US-PGPUB; USPAT	OR	ON	2019/09/03 16:52
S65	12	baudino.in. and surround	US-PGPUB; USPAT	OR	ON	2019/09/03 16:52
S66	1	"20080077261"	US-PGPUB; USPAT	OR	ON	2019/09/03 16:53
S67	86	("2008/0077261").URPN.	USPAT	OR	ON	2019/09/03 16:53

S68	0	"20070087686"	USPAT	OR	ON	2019/09/03 16:54
S69	2	"20070087686"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 16:54
S70	148	("2007/0087686").URPN.	USPAT	OR	ON	2019/09/03 16:55
S71	75	S70 and (id3$6 meta$6) and (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:55
S72	0	S70 and (id3$6 meta$6) same (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:55
S73	86	("2008/0077261").URPN.	USPAT	OR	ON	2019/09/03 16:57
S74	51	S73 and (id3$6 meta$6) and (equali$9 eq surround)	USPAT	OR	ON	2019/09/03 16:57
S75	1	S70 and (id3$6 meta$6) same (frequency)	USPAT	OR	ON	2019/09/03 17:04
S76	130,802	(id3$6 meta$6) same (frequency)	USPAT	OR	ON	2019/09/03 17:04
S77	2,763	(id3$6 meta$6) same (frequency) near3 adjust$6	USPAT	OR	ON	2019/09/03 17:04
S78	27	(id3$6 meta$6) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	USPAT	OR	ON	2019/09/03 17:04
S79	62	(id3$6 meta$6) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:05
S80	25	(id3$6 meta$3data meta$6tag tag$4) same (frequency) near3 adjust$6 and (700/94.ccls. "381".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:06
S81	1,438	(id3$6 meta$3data meta$6tag tag$4) same (frequency) near3 adjust$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:06
S82	89	("2009/0047993").URPN.	USPAT	OR	ON	2019/09/03 17:08
S83	12	replaygain autoeq	USPAT	OR	ON	2019/09/03 17:10
S84	12	replay$4gain$4 autoeq$4	USPAT	OR	ON	2019/09/03 17:11
S85	79	replay$4gain$4 autoeq$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 17:11
S86	2	"20090047993"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13

S87	1	"20090047993" and (channel stereo surround)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13
S88	36	oh.in. and preset near4 metadata	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 19:13
S89	5	(eq equali$8) same preset near3 metadata	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:07
S90	13	(eq equali$8) same preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:07
S91	116	(eq equali$8) and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:08
S92	0	oh.in. and (freqeuncy) and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S93	47	oh.in. and preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S94	1	mpeg$6 and frequency same preset near3 (attribute metadata)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/09/03 20:15
S95	1	("272833" "552049").pn. and available	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:35
S96	0	("272833" "552049").pn. and available and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:35
S97	0	("272833" "552049").pn. and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S98	0	("272833" "552049").pn. and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S99	3	("272833" "552049").ap. and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S100	3	("272833" "552049").ap. and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:36
S101	3	("272833" "552049").ap. and avail$6 and profile same (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:37

S102	3	("272833" "552049").ap. and avail$6 and profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S103	1	("272833" "552049").ap. and avail$6 same profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S104	1	"20120096125" and avail$6 same profile and (outside lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:38
S105	2	"20120096125" and avail$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 09:39
S106	2	"20120096125" and avail$6 and (local near4 network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:30
S107	2	"20120096125" and avail$6 and (network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:31
S108	2	"20120096125" and avail$6 and profil$6 same (network lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:32
S109	2	"20120096125" and avail$6 and profil$6 same (network sav$6 lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:32
S110	2	"20120096125" and avail$6 and profil$6 same (obtain$5 network sav$6 lan)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:33
S111	1,213	network$6 with $6speaker with (settings profile)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:40
S112	163	network$6 with $6speaker with (settings profile) same frequency	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:40
S113	9	network$6 with $6speaker with (settings profile) same frequency.ab.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:41
S114	100	network$6 with $6speaker with (settings profile).ab.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S115	11	network$6 with $6speaker with (settings profile).ab. and S112	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S116	344	network$6 with $6speaker with (settings profile) same (equaliz$6 frequency eq)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42

S117	11	S114 and S116	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:42
S118	7	("20130173761" | "20140093085" | "20150094834" | "20150095774" | "20150200923" | "20160014514" | "20170094437").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2019/10/01 11:43
S119	104	thiele$8 with network	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S120	104	thiele$8 with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S121	0	(thiele$8small thiele adj small) with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:46
S122	0	(theile$8small theile adj small) with network$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S123	11	(theile$8small theile adj small)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S124	142	(thiele$8small thiele adj small)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S125	153	S123 S124	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S126	1	S125 same network$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S127	4	S125 same (quer$6 network$6 server online)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:47
S128	3	"20120096125" and profil$6 same (select$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:49
S129	41	id3$4 same (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 11:50
S130	7	"306313" and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53
S131	1	"306313".ap. and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53

S132	1	"306313".ap. and (eq equaliz$6) and database	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:53
S133	60	("20070201717" | "20080181443" | "4742887" | "7194102" | "7489794" | "20050123162" | "20070223735" | "7634099" | "7864975" | "7317806" | "20070025559" | "6687379" | "20060104452" | "20060222185" | "7672469" | "20070135180" | "20090274309" | "20090041262" | "7194103" | "7869616" | "7263195" | "7876920" | "4284860" | "6687379" | "5784474" | "20060104453" | "20140112484" | "20070025559" | "20120106750" | "5784474" | "20120106750" | "7876921").PN.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:54
S134	47	"8131389" and (id3$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:57
S135	1	"8131389" and (id3$4 meta$6)and (id3$4 meta$6) same (eq equali$8)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 12:58
S136	0	korhonen.in. and id3$5	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:21
S137	142	("20010042107" | "20020022453" | "20020026442" | "20020072816" | "20020078161" | "20020124097" | "20030002689" | "20030157951" | "20030161479" | "20030210796" | "20040015252" | "20040024478" | "20040237750" | "20050147261" | "20060173972" | "20060205349" | "20060229752" | "20070003067" | "20070142944" | "20080002839" | "20080025535" | "20080045140" | "20080077261" | "20080092204" | "20080144864" | "20080152165" | "20080162668" | "20080175411" | "20090024662" | "20100052843" | "20100142735" | "20100284389" | "20100299639" | "20110044476" | "20110170710" | "20110299696" | "20120051558" | "20120096125" | "20120127831" | "20120263325" | "20130010970" | "20130028443" | "20130259254" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" |	US-PGPUB; USPAT	OR	ON	2019/10/01 13:22

		"20140233755" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "4995778" | "5218710" | "5440644" | "5553147" | "5668884" | "5673323" | "5761320" | "5910991" | "5923902" | "5946343" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6704421" | "6757517" | "6778869" | "6916980" | "6931134" | "7072477" | "7130608" | "7130616" | "7143939" | "7171010" | "7236773" | "7251533" | "7295548" | "7383036" | "7394480" | "7483538" | "7490044" | "7519188" | "7539551" | "7571014" | "7607091" | "7630500" | "7630501" | "7643894" | "7657910" | "7689305" | "7792311" | "7853341" | "7987294" | "8014423" | "8045952" | "8054987" | "8063698" | "8103009" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8234395" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8423893" | "8452020" | "8483853" | "8521316" | "8577045" | "8600075" | "8620006" | "8831761" | "8843224" | "8855319" | "8879761" | "8914559" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556").PN.				
S138	5	S137 and id3$5	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:22
S139	4	S137 and id3$5 and (eq equali$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:23
S140	2	S137 and id3$5 and (id3$5 meta$6) same (eq equali$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:24
S141	4	("20020072816" "20080045140").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:30
S142	2	("20020072816" "20080045140").pn. and select$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:30

S143	0	("20020072816" "20080045140").pn. and select$6 same profil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:33
S144	0	("20020072816" "20080045140").pn. and select$6 and profil$6 same (frequency eq equali$9 filter $5pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:33
S145	2	("20020072816" "20080045140").pn. and select$6 same (frequency parameter eq equali$9 filter $5pass)	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/01 13:35
S146	262	"5594859" "20070297690"	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 09:32
S147	2	"808676".ap. and peak	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 15:12
S148	2	"808676".ap. and peak and evolution	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/02 15:14
S149	9	"067747".ap. and switch$4	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S150	1	"067747".ap. and switch$4 near2 packet	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S151	7	mccord.xp. and swap$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:15
S152	0	mccord.xp. and swap$6 same clock$6	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S153	7	mccord.xp. and clock.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S154	8	mccord.xp. and clock$4.clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2019/10/03 12:16
S155	3	"20080291863"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:23
S156	2	"20070087686"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:26
S157	4	"20070087686" "20040020193"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:26

S158	6	("20010020193" | "20040264717" | "20050195999" | "20080291863" | "7620468" | "9112622").PN.	US-PGPUB; USPAT	OR	ON	2020/03/02 11:27
S159	1	("20070087686" "20040020193") and (frequenc$6 equali$6 eq)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:29
S160	9	lenbrook	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:31
S161	785	((("SONOS") near3 ("INC"))).AS,AANM.	USPAT	OR	ON	2020/03/02 11:32
S162	47	((("SONOS"))).AS,AANM. and oleg.xp,xa.	USPAT	OR	ON	2020/03/02 11:32
S163	43	((("SONOS"))).AS,AANM. and mccord.xp,xa.	USPAT	OR	ON	2020/03/02 11:33
S164	1	"8942252".pn.	USPAT	OR	ON	2020/03/02 11:34
S165	3	"8942252".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:34
S166	2	"7391791".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:35
S167	14	("20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7975051" | "8270631" | "8601394" | "8688431").PN.	US-PGPUB; USPAT	OR	ON	2020/03/02 11:36
S168	20	S158 S167	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:36
S169	4	"20020072816" "20080077261"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 11:37
S170	14	"405931".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/02 16:45
S171	7	("186991" "619226" "248528" "363784").ap. and wollmershauser	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/04 09:24
S172	978	("7987294" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "7792311" "20090060219" "20090169030" "5774016" "8024055" "7308188"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12

		"6919771" "7630501" "20020150053" "987294" "7792311" "20120051567" "7263110" "7305694" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "6684060" "6571103" "6208846" "7710941" "7305694" "6684060" "6571103" "6208846" "7710941" "20020072816" "6469633" "20020124097" "7668964" "20020150053" "7630501" "20020072816") ("20010027498" | "20020124097" | "20020184310" | "20030055892" | "20030131226" | "20030204273" | "20030204509" | "20040133689" | "20040168081" | "20050170781" | "20050181348" | "20050216556" | "20050239445" | "20050262082" | "20060095516" | "20060142034" | "20060173976" | "20070022207" | "20070142944" | "20070192156" | "20080010652" | "20090138921" | "20090304205" | "20100036950" | "20130014232" | "5255326" | "5598278" | "5636345" | "5696896" | "5787249" | "5808662" | "5946343" | "6349352" | "6662231" | "6757517" | "6778869" | "6839752" | "6907458" | "6990211" | "7218708" | "7236739" | "7263070" | "7266840" | "7293060" | "7334043" | "7356011" | "7412499" | "7433324" | "7469139" | "7571014" | "7643894" | "7668990" | "7669219" | "7835689" | "8045952" | "8234395" | "8249071" | "8280076" | "8290603" | "8326951").PN. and social$5				
S173	971	("7987294" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "7792311" "20090060219" "20090169030" "5774016" "8024055" "7308188" "6919771" "7630501" "20020150053" "987294" "7792311" "20120051567" "7263110" "7305694" "20020124097" "20020112084" "20030023411" "20020083342" "20020083172" "20030046703" "6684060" "6571103" "6208846" "7710941" "7305694" "6684060" "6571103" "6208846" "7710941" "20020072816" "6469633"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12

		"20020124097" "7668964" "20020150053" "7630501" "20020072816")				
S174	7	("20010027498" | "20020124097" | "20020184310" | "20030055892" | "20030131226" | "20030204273" | "20030204509" | "20040133689" | "20040168081" | "20050170781" | "20050181348" | "20050216556" | "20050239445" | "20050262082" | "20060095516" | "20060142034" | "20060173976" | "20070022207" | "20070142944" | "20070192156" | "20080010652" | "20090138921" | "20090304205" | "20100036950" | "20130014232" | "5255326" | "5598278" | "5636345" | "5696896" | "5787249" | "5808662" | "5946343" | "6349352" | "6662231" | "6757517" | "6778869" | "6839752" | "6907458" | "6990211" | "7218708" | "7236739" | "7263070" | "7266840" | "7293060" | "7334043" | "7356011" | "7412499" | "7433324" | "7469139" | "7571014" | "7643894" | "7668990" | "7669219" | "7835689" | "8045952" | "8234395" | "8249071" | "8280076" | "8290603" | "8326951").PN. and social$5	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:12
S175	124	S173 and social$5	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:13
S176	7	("9665339" "9286384" "8234395").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:41
S177	6	("20130174204" "20090216855" "20100235520").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:44
S178	3	"20130073979"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 15:53
S179	3	"20130073979"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/05 20:04
S180	2	"20130073979" and authent$9 same (listen$4 song brows$4 music)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 09:22
S181	2	"20130073979" and authent$9 same (listen$4 song brows$4 music) same device	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 09:22

S182	2	"20130073979" and search$6 with user	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 10:52
S183	2	"20130073979" and (quer$6 search$6) with (graph user)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:09
S184	2	"20130073979" and (quer$6 search$6) with (graph user griend)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:10
S185	2	"20130073979" and (quer$6 search$6) with (graph user friend$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:10
S186	2	"20130073979" and (quer$6 search$6 distanc$4) with (graph user friend$5)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:16
S187	2	"20130073979" and (quer$6 search$6 distanc$4) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:17
S188	3	"20130073979" and (quer$6 search$6 distanc$4 connect$5) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:17
S189	2	"20130073979" and music with tracking	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:35
S190	15	"664634".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:41
S191	3	"20130073979" and (connect$5) with (graph user friend$5 social$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:43
S192	3	"20130073979" and (connect$5) with (graph user friend$5 social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S193	3	"20130073979" and (connect$5 friend$5) with (graph user social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S194	3	"20130073979" and (connect$5 friend$5 user) with (graph social$6 quer$7 search$5 click$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:44
S195	4,042,155	"20130073979" and ceiling floor thresh$8	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:49
S196	2	"20130073979" and (ceiling floor thresh$8)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 11:49

S197	4	("20140122590" "20130073584").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 13:28
S198	2	"20130073979" and play$6 near4 device	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 13:53
S199	8	"9723038"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 14:11
S200	2	"9723038".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/06 14:11
S201	6	"20050195999" "20150092960"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:18
S202	0	"20050195999" and frequency	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:18
S203	80	yamaha and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:19
S204	80	yamaha and mccord.xp,xa.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:20
S206	25	yamaha.as. and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/07 11:20
S207	1	"727784".ap. and equil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:03
S208	4	b64c2220/00.cpc. and song	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:05
S209	7	b64c2220/00.cpc. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:05
S210	843	b64c.cpcl. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06
S211	33	b64c.cpcl. and (music song) and equil$9	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06
S212	47	b64c.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:06

S213	35	g10k.cpcl. and motor with (equil$8 pwm)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:08
S214	79	S212 S213	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:08
S215	3	S212 and S213	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 09:09
S216	5	("20100134058" | "20110290573" | "20170130625" | "8212505" | "9271073").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 09:12
S217	1	"20130076286"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 09:32
S218	0	"20080326259"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 10:15
S219	5	"8212505"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/09 10:15
S220	0	("10193489").URPN.	USPAT	OR	ON	2020/03/09 10:17
S221	1	"20100134058"	USPAT	OR	ON	2020/03/09 10:21
S222	3	"20100134058"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:21
S223	178	"9202509" "8788080" "9219959" "10136218" "10555082"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:22
S224	15	("9202509" "8788080" "9219959" "10136218" "10555082").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:27
S225	4	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and frequen$6.ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:27
S226	6	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and (equal$7 frequen$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 10:28
S227	200	("10133536" | "10157033" | "10175930" | "20010001160" | "20010009604" | "20010020193" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

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		"7519188" | "7519667" | "7539551" | "7548744" | "7548851" | "7558224" | "7558635" | "7561932" | "7571014" | "7574274" | "7599685" | "7606174" | "7620468" | "7626952" | "7627825" | "7630500" | "7630501" | "7631119" | "7643894" | "7653344" | "7657224" | "7657644" | "7657910" | "7665115" | "7668990" | "7669113" | "7669219" | "7672470" | "7675943" | "7676044" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7975051" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8229125" | "8230099" | "8233029" | "8233632" | "8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8270631" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" |			

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S232	3	"20130163786"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 12:21
S233	25	yamaha.as. and mccord.xp,xa.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:46
S234	20	yamaha.as. and mccord.xp,xa. and (equali$8 eq frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:47
S235	8	"7933422" and (equali$8 eq frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:53
S236	198	yamaha.as. and (equali$8 eq frequency) and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:53
S237	51	yamaha.as. and (equali$8 eq frequency) same second and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 14:54
S238	3	"20040159218"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:15
S239	1	S238 and (equali$8 eq frequency) same second and 700/94.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:17
S240	2	S238 and (equali$8 eq frequency) same second	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/09 15:17
S241	6	wireless$5 with (cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:15
S242	11	wireless$5 with (madi cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:16
S243	11	wireless$5 with (aes10 madi cobra$3net$4 ether$3sound$4)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:20
S244	233	sonos.as. and (frequency equal$8).clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 11:59
S245	4	"318".clas. and (sound music) and (equil$9 with (amplitude volume))	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:26

S246	1	"727784".ap. and equil$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S247	4	b64c2220/00.cpc. and song	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S248	7	b64c2220/00.cpc. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S249	845	b64c.cpcl. and (music song)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S250	34	b64c.cpcl. and (music song) and equil$9	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S251	48	b64c.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S252	35	g10k.cpcl. and motor with (equil$8 pwm)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S253	80	S251 S252	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S254	3	S251 and S252	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S255	5	("20100134058" | "20110290573" | "20170130625" | "8212505" | "9271073").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
S256	1	"20130076286"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
S257	0	"20080326259"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
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S259	0	("10193489").URPN.	USPAT	OR	ON	2020/03/10 13:42
S260	1	"20100134058"	USPAT	OR	ON	2020/03/10 13:42
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S262	178	"9202509" "8788080" "9219959" "10136218" "10555082"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S263	15	("9202509" "8788080" "9219959" "10136218" "10555082").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S264	4	("9202509" "8788080" "9219959" "10136218" "10555082").pn. and frequen$6.ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S265	1,064	S246 S247 S248 S249 S250 S251 S252 S253 S254 S255 S256 S257 S258 S259 S260 S261 S262 S263 S264 S264	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42
S266	49	"3736880"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:04
S267	99	g10k.cpcl. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:05
S268	2	b64c2220/00.cpc. and (music song) and (pwm equil$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S269	144	S267 S268 S251	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S270	1	"727784".ap. and S269	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 14:06
S271	13	("2005/0195999").URPN.	USPAT	OR	ON	2020/03/18 11:49
S272	20	("20010020193" | "20020015003" | "20040264717" | "20050195999" | "20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7620468" | "7975051" | "8270631" | "8601394" | "8688431" | "9112622").PN.	US-PGPUB; USPAT	OR	ON	2020/04/03 09:21
S273	200	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" |	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22

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S278	4	("228812" "806070" "013740" "853790").ap. and sonos.as.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 11:09
S279	809	((("Sonos") near3 ("Inc"))).AS,AANM.	USPAT	OR	ON	2020/04/03 11:10
S280	6	("228812" "806070" "013740" "853790").ap. and sonos.as,aanm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 11:10

S281	2	"8422697"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/03 14:10
S282	11	"10228898"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/06 09:38
S283	3	"405931".ap. and driver	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:41
S284	5	("853790" "013740" "083499" "299847" "825961").ap. and speaker with driver	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:48
S285	7	("853790" "013740" "083499" "299847" "825961").ap. and (speaker driver) and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:48
S286	15	("8483853" "9202509" "8788080" "9219959" "9756424").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:50
S287	5	("8483853" "9202509" "8788080" "9219959" "9756424").pn. and determin$6 same pair$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 15:55
S288	4	("20020072816" "20080077261").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:18
S289	204	("20070220150" | "20080109852" | "5197099" | "5642171" | "6119239" | "6122749" | "6703940" | "6870934" | "7269338" | "7313384" | "7975051" | "8270631" | "8601394" | "8688431" | "20010020193" | "20040264717" | "20050195999" | "20080291863" | "7620468" | "9112622" | "20040114771" | "20060045281" | "20130236029" | "20150286360" | "20170188152" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

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		"7827259" | "7831054" | "7835689" | "7849181" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945636" | "7945708" | "7958441" | "7962482" | "7966388" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8054987" | "8055364" | "8063698" | "8074253" | "8086287" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8135141" | "8139774" | "8144883" | "8148622" | "8150079" | "8160281" | "8169938" | "8170222" | "8170260" | "8175292" | "8175297" | "8185674" | "8189824" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8229125" | "8230099" | "8233029" | "8233632" | "8233635" | "8233648" | "8234395" | "8238578" | "8239559" | "8239748" | "8243961" | "8265310" | "8279709" | "8281001" | "8285404" | "8290185" | "8290603" | "8300845" | "8306235" | "8311226" | "8315555" | "8316147" | "8325931" | "8325935" | "8331585" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8391501" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8452020" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" | "8886347" | "8904066" | "8914559").PN.				
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S294	1,055	S289 S290 S291 S292 S293	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:57
S295	195	S294 and (eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:58
S296	55	S294 and (eq equaliz$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/14 16:58
S297	0	"001502".ap. and teim with change same first	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:08

S298	1	"001502".ap. and time with change same first	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:08
S299	1	"001502".ap. and time with change same signal	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:09
S300	3	"001502".ap. and time with change	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 13:09
S301	15	"486646".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:31
S302	15	tunersphere	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S303	14	tunersphere and point$4	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S304	14	tunersphere and point$4 with user	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:32
S305	272	user near3 point$4 same arm near9 angle	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:33
S306	26	user near3 point$4 same arm near9 angle and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:34
S307	27	user near3 (indicat$6 point$4) same arm near9 angle and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:34
S308	13	"275889".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:35
S309	25	user near3 (indicat$6 point$4) same arm near9 angle same3 distanc$4 and listen$6	US-PGPUB; USPAT; DERWENT	OR	ON	2020/04/15 14:59
S310	13	("20020129128" | "20030100335" | "20040203936" | "20060281409" | "20160234615" | "5313524" | "6085236" | "6741708" | "7215649" | "7274761" | "7690017" | "8134650" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/04/16 14:37
S311	62	sonos.as. and lambourne.in. and scene	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:12

S312	1	"613471".ap. and triplett	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:12
S313	2	"20170269900"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:13
S314	4	sonos.as. and lambourne.in. and scene and @pd<="20130723"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:13
S315	4	("7571014" "20130014015").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:18
S316	45	("2013/0014015").URPN.	USPAT	OR	ON	2020/05/13 10:40
S317	0	"20130014015".pn.	USPAT	OR	ON	2020/05/13 10:41
S318	2	"20130014015".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:41
S319	2	"619237".ap. and lambourne	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/13 10:41
S320	0	"338710".ap. and soos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:20
S321	2	"338710".ap. and sonos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:20
S322	1	"8989882".pn. and (video type).clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/05/29 11:31
S323	1,740	auxil$7 near2 channel and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S324	35,142	(mp4 mpeg4 mpeg adj "4" mpeg$3"4") and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S325	168	(mp4 mpeg4 mpeg adj "4" mpeg$3"4") and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and S323	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 11:58
S326	20,405	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") S323)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:00

S327	19,433	((mp4 mpeg4 mpeg adj "4" mpeg$3"4"))and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:01
S328	10	"676655".ap. and (eq equal$9)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:43
S329	1,740	auxil$7 near2 channel and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:56
S330	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") S329)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:56
S331	22,581	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:59
S332	8,929	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 adj data)and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 12:59
S333	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:00
S334	22,581	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S335	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S336	1,027	S334 and S335	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 13:32
S337	156	sonos.as. and @ad<="20080101"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:51

S338	185	sonos.as. and @ad<="20101013"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:51
S339	46	sonos.as. and @ad<="20101013" and (frequency eq equaliz$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:52
S340	33	sonos.as. and @ad<="20101013" and (frequency eq equaliz$6).ab,clm.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:55
S341	4	"20090047993" "20080098027"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 15:57
S342	109	("2009/0047993").URPN.	USPAT	OR	ON	2020/07/02 15:58
S343	16	("2009/0047993").URPN. not sonos.as.	USPAT	OR	ON	2020/07/02 15:59
S344	16	("2009/0047993").URPN. not sonos.as,aanm.	USPAT	OR	ON	2020/07/02 15:59
S345	1	("20020072816" "20080045140" "8131389").pn.	USPAT	OR	ON	2020/07/02 16:07
S346	6	("20020072816" "20080045140" "8131389").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:08
S347	1	S346 and (cluster$4 source) with (network server)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:20
S348	34	"5646602"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:23
S349	3	"5646602".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:24
S350	12	("5287547" "5182552" "5818948" "5646602").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:56
S351	3	("5287547" "5182552" "5818948" "5646602").pn. and (internet wan wide)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/02 16:58
S352	2	profile$4 same network and wan and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:29
S353	11	(wide wan) and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:30

S354	6	(wide wan) and "272833".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:31
S355	2	profile$4 same lan and wan and "676655".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:33
S356	22,592	(eq equal$6) same (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S357	8,232	((mp4 mpeg4 mpeg adj "4" mpeg$3"4") auxil$8 near2 channel) and (acoustic$5 preset$4 audio) near3 (data parameters characteristic$4 meta$6) same (client server network$4 intenet wan) and (eq equal$6)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S358	1,027	S356 and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:42
S359	209	(acoustic$6 eq equaliz$6 frequency) near2 (profile pref preferenc$4) near4 (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:43
S360	0	S357 and S359	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S361	784	(acoustic$6 eq equaliz$6 frequency) near2 (profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S362	4,404	(acoustic$6 eq equaliz$6 frequency) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S363	6,510	(acoustic$6 eq equaliz$6 frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:44
S364	53	S357 and S363	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:45
S365	29,797	S356 S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S366	252	S365 and S363	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S367	199	S365 and S363 not S364	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46

S368	59	S365 and S363 not S364 and (700/94.ccls. "381".clas. "704".clas.)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 12:46
S369	26	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4) with (server database library) and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:06
S370	90	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and S357	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:07
S371	64	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and S357 not S369	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:08
S372	5	(frequency preset) near2 (parameter$6 character$6 profile pref preferenc$4 data) with (server database library) and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:13
S373	269	chung and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:13
S374	32	chung.in. and mccord	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:15
S375	1	chung.in. and mccord.xa,xp.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:15
S376	49	preset and mccord.xa,xp.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:16
S377	1	"8880205" and supplemental	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:18
S378	2	"20060149402" and supplemental	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:19
S379	2	"20060149402" and supplemental same network	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:21
S380	5	("20030100335" | "20060281409" | "20160234615" | "7215649" | "9344206").PN.	US-PGPUB; USPAT	OR	ON	2020/07/04 13:39
S381	17	"10448159" "10642570"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40

S382	64	"2012137190"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S383	4	("10448159" "10642570").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S384	4	"2012137190".did.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:40
S385	7	S383 S384	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:41
S386	114	"9195258" "10209953"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:44
S387	11	("9195258" "10209953" "8588949" "9219959" "10439896").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:45
S388	2	"20030220705"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:48
S389	5	("8588949" "9219959").pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/04 13:49
S390	203	("20030100335" | "20060281409" | "20160234615" | "7215649" | "9344206" | "20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20040203936" | "5313524" | "6085236" | "6741708" | "7274761" | "7690017" | "8134650" | "10133536" | "10157033" | "10175930" | "20010001160" | "20010009604" | "20010020193" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "20020002562" | "20020002565" | "20020003548" | "20020022453" | "20020026442" | "20020034374" | "20020042844" | "20020049843" | "20020062406" | "20020065926" | "20020067909" | "20020072816" | "20020072817" | "20020073228" | "20020078161" | "20020078293" | "20020080783" | "20020090914" | "20020093478" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"20020095460" | "20020098878" | "20020101357" | "20020103635" | "20020109710" | "20020112244" | "20020114354" | "20020114359" | "20020124097" | "20020129156" | "20020131398" | "20020131761" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" | "20030020763" | "20030023741" | "20030031333" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030055892" | "20030061428" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030091322" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" | "20030110329" | "20030126211" | "20030135822" | "20030157951" | "20030161479" | "20030167335" | "20030172123" | "20030177889" | "20030179780" | "20030185400" | "20030195964" | "20030198254" | "20030198255" | "20030198257" | "20030200001" | "20030204273" | "20030204509" | "20030210796" | "20030212802" | "20030219007" | "20030227478" | "20030229900" | "20030231208" | "20030231871" | "20030235304" | "20040001106" | "20040001484" | "20040001591" | "20040008852" | "20040010727" | "20040012620" | "20040014426" | "20040015252" | "20040019497" | "20040019807" | "20040019911" | "20040023697" | "20040024478" | "20040024925" | "20040027166" | "20040032348" | "20040032421" | "20040037433" | "20040041836" | "20040042629" | "20040044742" | "20040048569" | "20040059842" | "20040059965" | "20040066736" | "20040071299" |			

		"20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "20040114771" | "20040117044" | "20040117462" | "20040128701" | "20040131192" | "20040133689" | "20040143368" | "20040143852" | "20040147224" | "20040148237" | "20040168081" | "20040170383" | "20040171346" | "20040177167" | "20040179554" | "20040183827" | "20040185773" | "20040203354" | "20040203378" | "20040203590" | "20040208158" | "20040213230" | "20040220687" | "20040223622" | "20040224638" | "20040225389" | "20040228367" | "20040248601" | "20040249490" | "20040249965" | "20040249982" | "20040252400" | "20040253969" | "20040264717" | "20050002535" | "20050010691" | "20050011388" | "20050013394" | "20050015551").PN.				
S391	200	("20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050144284" | "20050147261" | "20050154766" | "20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050195999" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060045281" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" | "20060193454" | "20060193482" | "20060199538" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

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S403	2	"7571014".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:27
S404	3	"921959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:29
S405	3	"9219959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:30
S406	2	"8483853".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S407	0	"013740".pn. and sonos	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S408	0	"013740".pn. and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S409	2	"013740".ap. and kallai	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:32
S410	2	"7987294".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:36
S411	0	"8423893".ap.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 12:37

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S414	3	"9219959".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:43
S415	2	"7792311".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:45
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S417	743	"7483538"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:48
S418	2	"7483538".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:48
S419	2	"20040014426".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:50
S420	2	"7561697".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:52
S421	2	"7123731".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:55
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S423	3	"5910990".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 13:59
S424	2	"7634093".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 14:00
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S426	6	"7907736".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/05 14:02

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S434	2	"7123731".pn.	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:48
S435	2	"7123731".pn. and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:49
S436	2	"20050100174 ".pn. and (eq equali$9 frequency)	US-PGPUB; USPAT; DERWENT	OR	ON	2020/07/06 11:51
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Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT
(Not for submission under 37 CFR 1.99)

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Filing Date	2019-10-31
First Named Inventor	Christopher Kallai
Art Unit	2654
Examiner Name	Paul McCord
Attorney Docket Number	11-0401-CON1019A

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	1	5313524		1994-05-17	Van Hulle et al.	
	2	6085236		2000-07-04	Lea	
	3	7274761		2007-09-25	Muller et al.	
	4	7690017		2010-03-30	Stecyk et al.	
	5	8134650		2012-03-13	Maxson et al.	
	6	6741708		2004-05-25	Nakatsugawa	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	Christopher Kallai
	Art Unit	2654
	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

	1	20020129128		2002-09-12	Gold et al.	
	2	20040203936		2004-10-14	Ogino et al.	
	3	20020083172		2002-06-27	Knowles et al.	
	4	20020083342		2002-06-27	Webb et al.	
	5	20020112084		2002-08-15	Deen et al.	
	6	20030023411		2003-01-30	Witmer et al.	
	7	20030046703		2003-03-06	Knowles et al.	

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	1	1058985	EP	A2	2000-12-13	Sony Electronics INC		

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	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Sonos, Inc. v. Google LLC, Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 46 pages.	
	2	Sonos, Inc. v. Google LLC, Appendix A to Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 2 pages.	
	3	Sonos, Inc. v. Google LLC, Appendix B to Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 176 pages.	
	4	AudioPoint, Welcome to the coolest way to listen to digital music over your conventional stereo equipment, Home Director HD00B02, September 2002, 2 pages	
	5	AudioPoint from Home Director. Play Digital Music on Your Conventional Stereo System, 2 pages.	
	6	Squeezebox by Logitech. Owner's Guide, 2007, 32 pages.	
	7	Squeezebox Network Music Player. Owner's Manual, Slim Devices, 2003, 22 pages.	

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	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2020-04-27
Name/Print	Jeffrey P. Armstrong	Registration Number	54,967

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).

7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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Art Unit	2654
Examiner Name	Paul C. McCord
Attorney Docket Number	11-0401-CON1019A

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	3	Sonos v. Google. Respondents' Initial Invalidity Claim Charts for Patent US 10,439,896, Exhibits 1-16 and B, dated 29 April 2020, 1102 pages.	
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	13	Synchronizing mp3 playback. 3 pages [online]. [retrieved on 2020-03-26]. Retrieved from the Internet URL: https://snarfed.org/synchronizing_mp3_playback.	
	14	Teirikangas, Jussi. HAVi: Home Audio Video Interoperability. Helsinki University of Technology, 2001, 10 pages.	
	15	TOA Electronics, Inc. DP-0206 Digital Signal Processor. DACsys 2000, 2001, 12 pages. .	
	16	UPnP AV Architecture:0.83 For UPnP Version 1.0, 12 June 2002, copyright 2000, 22 pages. .	
	17	UPnP Forum. UPnP Device Architecture 1.0. October 15, 2008, 80 pages.	
	18	Weverka et al. Windows XP Gigabook for Dummies. Wiley Publishing, Inc. 2004, 915 pages.	
	19	Wireless Home Audio Director. Wireless N Music Player with Integrated Amplifier DMC250. Datasheet. Linksys by Cisco. Fill Your Home with Music, 2008, 2 pages. .	
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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-05-21
Name/Print	Brandon J. Kennedy	Registration Number	67894

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Doc code: IDS
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	12	Support. Manuals & Documentation. Micro Audio System MCW770/37. Philips. Copyright 2004-2020, 3 pages. [online], [retrieved on 2020-02-24]. Retrieved from the Internet URL: https://www.usa.philips.com/c-p/MCW770_37/-/support.	
	13	Synchronizing mp3 playback. 3 pages [online]. [retrieved on 2020-03-26]. Retrieved from the Internet URL: https://snarfed.org/synchronizing_mp3_playback.	
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	20	Yahoo Groups. Exstreamer. Barix Exstreamer. Access via Wayback Machine http://groups.yahoo.com/group/exstreamer/ December 22, 2013, 1 page. .	
	21	Yamaha DME Designer 3.0 Owner's Manual; Copyright 2008, 501 pages.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0401-CON1019A

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0401-CON1019A

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-05-21
Name/Print	Brandon J. Kennedy	Registration Number	67894

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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EFS ID:	39521552
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	26-MAY-2020
Filing Date:	31-OCT-2019
Time Stamp:	18:47:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS_Transmittal.pdf	84713 0c9330ff906f2dcf93f77af636badb325c9254d1	no	1

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4	Non Patent Literature	Bose_The_Bose_Lifestyle_Powered_Speaker_System_12-20-01_19pages.pdf	7417603 23eea77a92c4cf040d01acd89d1fe8ed9cc2c3ba	no	19
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8	Non Patent Literature	Digigram_EtherSound_ES8in8out_Nov_02_4pages.pdf	3338521 62a61cfb98f3c1b7583ee4960b773192b476f9ea	no	4
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57	Non Patent Literature	Googles_Counterclaims_to_Sonos_Complaint_Central_District_of_CA_13pages.pdf	454675 4efce173ecb5f8d4a3acde64a3be18e18848acc6	no	13
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58	Non Patent Literature	HP_Deskjet_5850_User_Guide_217pages.pdf	24275225 3f67f2c98b08d9dff0c4383f86f1891ac63deacd	no	217
Warnings:					
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		Total Files Size (in bytes):	358877326		

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New International Application Filed with the USPTO as a Receiving Office

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: May 21, 2020

By: /Brandon J. Kennedy/
Brandon J. Kennedy
Reg. No. 67,894
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9315
kennedy@ls3ip.com

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	McCord, Paul C.
	Attorney Docket Number	11-0401-CON1019A

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	McCord, Paul C.
	Attorney Docket Number	11-0401-CON1019A

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	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher.
	Art Unit	2654
	Examiner Name	McCord, Paul C.
	Attorney Docket Number	11-0401-CON1019A

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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-05-21
Name/Print	Brandon J. Kennedy	Registration Number	67894

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Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	26-MAY-2020
Filing Date:	31-OCT-2019
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Application Type:	Utility under 35 USC 111(a)

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Attorney Docket Number	11-0401-CON1019A

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	1	20030100335		2003-05-29	GASSHO; Kazuhito. et al.	
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	1	CANADIAN PATENT OFFICE, Canadian Office Action mailed on 27 January 2020, issued in connection with Canadian Application No. 3032479, 4 pages.	
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	6	Non-Final Office Action mailed on 13 April 2020, issued in connection with U.S. Patent Application No. 16/297991, filed on 11 March 2019, 16 pages.	☐
	7	Non-Final Office Action mailed on 13 February 2020, issued in connection with U.S. Patent Application No. 16/422160, filed on 24 May 2019, 8 pages.	☐
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	9	Notice of Allowance mailed on 27 November 2019, issued in connection with U.S. Patent Application No. 16/128443, filed on 11 September 2018, 5 pages.	☐

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2020-05-05
Name/Print	Brandon J. Kennedy	Registration Number	67894

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2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.

3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.

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EFS ID:	39359466
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	05-MAY-2020
Filing Date:	31-OCT-2019
Time Stamp:	18:07:02
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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Warnings:

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Warnings:					
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4	Non Patent Literature	15405931_FOA_14-0601-CON0117_4-20-2020_8pages.pdf	339335 65fb356850f57c742a8843357132e079a50bed75	no	8
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Warnings:					
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Warnings:					
Information:					
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10	Transmittal Letter	IDS_Transmittal.pdf	83891 52ae3b46af9ecc53d4361b4fbd1b9a2d57fc9ff2	no	1
Warnings:					
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11	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_0_IDS_20200505163531.pdf	1053987 f5a1052967e4b8a3de61f1bc95956c6ec9e46e6a	no	5
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National Stage of an International Application under 35 U.S.C. 371

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0401-CON1019A)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/670,109	)	
	)	
Filed: October 31, 2019	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7387	)	
	)	
For: Playback Device Pairing	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

TRANSMITTAL WITH INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.34, the undersigned hereby confirms that the attached Information Disclosure Statement (IDS) is being filed in accordance with the undersigned's authority to act in a representative capacity on behalf of Applicant, Sonos, Inc., in connection with the preparation and filing of IDSs for the above-referenced matter.

Respectfully submitted,

Dated: May 5, 2020

By: /Brandon J. Kennedy/
Brandon J. Kennedy
Reg. No. 67,894
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9315
kennedy@ls3ip.com

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
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	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	Christopher Kallai
	Art Unit	2654
	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

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	4	7690017		2010-03-30	Stecyk et al.	
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	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

	1	20020129128		2002-09-12	Gold et al.	
	2	20040203936		2004-10-14	Ogino et al.	
	3	20020083172		2002-06-27	Knowles et al.	
	4	20020083342		2002-06-27	Webb et al.	
	5	20020112084		2002-08-15	Deen et al.	
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	Filing Date	2019-10-31
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	Art Unit	2654
	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1	Sonos, Inc. v. Google LLC, Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 46 pages.	
	2	Sonos, Inc. v. Google LLC, Appendix A to Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 2 pages.	
	3	Sonos, Inc. v. Google LLC, Appendix B to Respondents' Response to the Complaint and Notice of Investigation, filed February 27, 2020, 176 pages.	
	4	AudioPoint, Welcome to the coolest way to listen to digital music over your conventional stereo equipment, Home Director HD00B02, September 2002, 2 pages	
	5	AudioPoint from Home Director. Play Digital Music on Your Conventional Stereo System, 2 pages.	
	6	Squeezebox by Logitech. Owner's Guide, 2007, 32 pages.	
	7	Squeezebox Network Music Player. Owner's Manual, Slim Devices, 2003, 22 pages.	

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	Filing Date	2019-10-31
	First Named Inventor	Christopher Kallai
	Art Unit	2654
	Examiner Name	Paul McCord
	Attorney Docket Number	11-0401-CON1019A

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See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2020-04-27
Name/Print	Jeffrey P. Armstrong	Registration Number	54,967

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(51) International Patent Classification 6 : **H04Q**	**A2**	**(11) International Publication Number:** **WO 99/35856** **(43) International Publication Date:** 15 July 1999 (15.07.99)

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(22) International Filing Date: 9 December 1998 (09.12.98)

(30) Priority Data:
09/003,252 6 January 1998 (06.01.98) US

(71) Applicant: SONY ELECTRONICS, INC. [US/US]; 1 Sony Drive, Park Ridge, NJ 07656 (US).

(72) Inventor: LEA, Rodger, J.; 210 & 1/2 16th Street, San Jose, CA 95113 (US).

(74) Agents: GALLENSON, Mavis, S. et al.; Ladas & Parry, Suite 2100, 5670 Wilshire Boulevard, Los Angeles, CA 90036–5679 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: AN AUDIO VIDEO NETWORK

(57) Abstract

A method and system for providing seamless interoperability and integration between a plurality of devices in a network using a common protocol, wherein at least one of the devices is a legacy device which communicates with the network using a proprietary protocol. When a legacy device is coupled to the network, one of the plurality of devices on the network queries the legacy device via the proprietary protocol to determine a set of basic capabilities supported by the legacy device. The set of basic capabilities are then mapped from the proprietary protocol to a set of basic commands from the common protocol. A control module is generated for the legacy device, wherein the control module is based upon the set of basic commands. The set of basic capabilities of the legacy device are then accessed via the control module, thereby providing seamless interoperability and integration of the legacy device with the plurality of devices.

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AN AUDIO VIDEO NETWORK

FIELD OF THE INVENTION

The field of the present invention pertains to audio-video systems. More particularly, the present invention pertains to the networking of a number of electronic devices to form an audio video system. In one embodiment the present invention discloses a home audio video network with device control modules for incorporating legacy devices.

BACKGROUND OF THE INVENTION

A typical home audiovisual equipment set up includes a number of components. For example, a radio receiver, a CD player, a pair of speakers, a television, a VCR, a tape deck, and alike. Each of these components are connected to each other via a set of wires. One component is usually the central component of the home audiovisual system. This is usually the radio receiver, or the tuner. The tuner has a number of specific inputs for coupling the other components. The tuner has a corresponding number of control buttons or control switches which provide a limited degree of controllability and interoperability for the components. The control buttons and control switches are usually located on the front of the tuner. In many cases, some, or all, of these buttons and switches are duplicated on a hand held remote control unit. A user controls the home audiovisual system by manipulating the buttons and switches on the front

of the tuner, or alternatively, manipulating buttons on the hand held remote control unit.

This conventional home audiovisual system paradigm has become quite popular. As consumer electronic devices become more capable and more complex, the demand for the latest and most capable devices has increased. As new devices emerge and become popular, the devices are purchased by consumers and "plugged" into their home audiovisual systems. Generally, the latest and most sophisticated of these devices are quite expensive (e.g., digital audio tape recorders, DVD players, digital camcorders, and alike). As a consumer purchases new devices, most often, the new device is simply plugged into the system alongside the pre-existing, older devices (e.g., cassette tape deck, CD player, and the like). The new device is plugged into an open input on the back of the tuner, or some other device couple to the tuner. The consumer (e.g., the user) controls the new device via the control buttons on the tuner, via the control buttons and control switches on the front of the new device itself, or via an entirely new, separate, respective remote control unit for the new device.

As the number of new consumer electronics devices for the home audiovisual system have grown and as the sophistication and capabilities of these devices have increased, a number of problems with the conventional paradigm have emerged. One such problem is incompatibility between devices in the home audiovisual system. Consumer electronic devices from one manufacturer often couple to an audiovisual system in a different manner than similar devices from another manufacturer. For example, a

tuner made by one manufacturer may not properly couple with a television made by another manufacturer.

In addition, were one device is much newer than another device additional incompatibilities may exist. For example, a new device might incorporate hardware (e.g., specific inputs and outputs) which enables more sophisticated remote control functions. This hardware may be unusable with older devices within the system. Or, for example, older tuners may lack suitable inputs for some newer devices (e.g., mini-disc players, VCRs, etc.), or may lack enough inputs for all devices of the system.

Another problem is the lack of functional support for differing devices within an audiovisual system. For example, even though a television may support advanced sound formats (e.g., surround sound, stereo, etc.), if an older less capable tuner does not support such functionality, the benefits of the advanced sound formats can be lost.

Another problem is the proliferation of controls for the new and differing devices within the home audiovisual system. For example, similar devices from different manufacturers can each have different control buttons and control switch formats for accomplishing similar tasks (e.g., setting the clock on a VCR, programming a VCR record a later program, and alike). In addition, each new device coupled to the audiovisual system often leads to another dedicated remote control unit for the user to keep track of and learn to operate.

While the emergence of networking and interface technology (e.g., IEEE 1394 serial communication bus and the wide spread adoption of digital systems) offers prospects for correcting these problems, there is still no coherent, open, extensible architecture which can provide for intelligent, self configuring, easily extensible devices or AV systems. For example, while various solutions involving the use of IEEE 1394 as the basis of an AV system, none provide for the extensibility of the AV system over its life time, as new devices are added whose capabilities and features are unknown. None of these systems guarantee that all devices can be communicated with and controlled and enjoyed by the user.

SUMMARY OF THE INVENTION

Accordingly, what is required is a new architecture for a home audiovisual system which corrects the interoperability and functionality problems of the conventional system. What is required is a new architecture for an open, interoperating, audiovisual system for devices within a home network. What is required is an architecture which allows devices from any manufacturer to function seamlessly with a home audiovisual system. What is required is an architecture which is extensible, and can be readily modified and advanced as market requirements and technology change.

The present invention provides a home audio visual (AV) network which defines an open architecture for inter-operating CE (consumer electronic) devices in a home network. The interoperability aspects of the present invention define an architectural model that allows CE devices from any manufacturer to inter-operate and function seamlessly within the user's home AV system. The system of the present invention includes a combination of a base set of generic device controls with an method to extend a base control protocol as new features and new CE devices are deployed within the home AV network. In so doing, the architecture of the present invention is extensible, and can be readily modified and advanced as market requirements and technology change.

To implement the above features, the present invention includes an architecture that allows the newly coupled device to be queried. Using the results of the query, a software based abstraction of that device is generated

and made available to other elements in the network. The software abstraction is referred to as a device control module. The device control module provides a predefined, standardized, set of interoperability, functionality, and control interfaces for the device. The CE device is coupled to and communicates with the home AV network via a device control module. Each CE device in the home AV system has a corresponding device control module (DCM). The DCM of the present invention also provides an application programming interface (API) to allow other applications to access and manipulate any newly coupled CE device.

Through the DCMs of the present invention, over the life time of the AV system, as new devices are added whose capabilities and features are unknown, or only partially known to other devices, a mechanism is provided which guarantees that all devices can be communicated with and controlled at some basic minimal level, and then where possible, as more information is obtained about the device, a better abstraction of the new device is created.

Because it is likely that some devices that will be available in the consumers home were built and sold before the creation of a common home network architecture, it is necessary that the architecture is capable of recognizing using these devices. These devices are referred to as legacy devices and they are generally analog devices controlled through proprietary control protocols.

To allow the architecture of the present invention to provide some level of control for these devices the architecture uses the proprietary communications path to query the device and discover its basic capabilities. The architecture then creates a level 1 DCM for this class of device, however, this level 1 DCM is special in that it is capable of mapping a generic device control command, such as play, to the specific legacy command protocol that the device uses. In some cases no such mapping will be available.

Specifically, in one embodiment of the present invention, when a legacy device is coupled to the network, one of the plurality of devices on the network queries the legacy device via the proprietary protocol to determine a set of basic capabilities supported by the legacy device. The set of basic capabilities are then mapped from the proprietary protocol to a set of basic commands from the common protocol. A level 1 DCM is then generated for the legacy device, wherein the DCM is based upon the set of basic commands. The set of basic capabilites of the legacy device are then accessed via the level 1 DCM, thereby providing seamless interoperability and integration of the legacy device with the plurality of devices. Using this mechanism, the base architectural model of generic, level 1 DCMs can be extended to deal with legacy devices that were built before the creation of the architecture of the present invention. In so doing, the present invention provides an extremely flexible mechanism that ensures that not only will new devices become part of the AV system, but that older devices will remain useful also.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention is illustrated by way of example and not by way of limitation, in the figures of the accompanying drawings and in which like reference numerals refer to similar elements and in which:

Figure 1A shows a home AV network in accordance with one embodiment of the present invention.

Figure 1B illustrates a logical bus configuration of the HAVI network of Figure 1A.

Figure 2, shows an exemplary peer to peer, two IAV (intermediate audio video) node network in accordance with one embodiment of the present invention.

Figure 3 shows a single FAV (full audio video) cluster HAVI network in accordance with one embodiment of the present invention.

Figure 4 shows an FAV cluster integrated with an IAV peer to peer HAVI network.

Figure 5 shows an exemplary HAVI network having multiple FAVs.

Figure 6 shows a diagram of a set top box in accordance with one embodiment of the present invention.

Figure 7 shows a logical block diagram of one embodiment of the HAVI architecture of the present invention.

Figure 8 shows a layered logic diagram of one HAVI architecture in accordance with the present invention.

Figure 9 shows a diagram of local and remote messaging in the HAVI architecture of one embodiment.

Figure 10 shows a diagram of a message being sent via 1394 in the HAVI architecture of one embodiment.

Figure 11 shows a diagram of an application invoking another application in one embodiment of the HAVI architecture.

Figure 12A shows a first exemplary UI display (e.g., on a television screen) for a device (e.g., the camcorder).

Figure 12B shows a second exemplary UI display (e.g., on a television screen) for a device(e.g., the camcorder).

Figure 13 shows a flow chart of a process for providing seamless interoperability and integration of a plurality of devices in a HAVI network by using the SDD information stored in each device in accordance with one embodiment of the present invention.

Figure 14 shows a flow chart of a process for providing a basic command functionality and an expanded command functionality between a plurality of devices in a HAVI network in accordance with one embodiment of the present invention.

Figure 15 shows a flow chart of a process for ensuring future upgradability and expandability of devices in HAVI network in accordance with one embodiment of the present invention.

Figure 16 shows a flow chart of a process for providing seamless interoperability and integration of legacy devices with the HAVI compliant devices in a HAVI network in accordance with one embodiment of the present invention.

Figure 17A shows a flow chart of a process for controlling devices within a home audio/video network using an application program from an external service provider accordance with one embodiment of the present invention.

Figure 17B shows a diagram of a HAVI network with the service provider in accordance with the process of Figure 17A.

DETAILED DESCRIPTION OF THE INVENTION

Reference will now be made in detail to the embodiments of the invention, examples of which are illustrated in the accompanying drawings. While the invention will be described in conjunction with the preferred embodiments, it will be understood that they are not intended to limit the invention to these embodiments. On the contrary, the invention is intended to cover alternatives, modifications and equivalents, which may be included within the spirit and scope of the invention as defined by the appended claims. Furthermore, in the following detailed description of the present invention, numerous specific details are set forth in order to provide a thorough understanding of the present invention. However, it will be obvious to one of ordinary skill in the art that the present invention may be practiced without these specific details. In other instances, well known methods, procedures, components, and circuits have not been described in detail as not to unnecessarily obscure aspects of the present invention.

The present invention provides a home AV network which defines an open architecture for inter-operating CE devices in a home network. The interoperability aspects of the present invention define an architectural model that allows CE devices from any manufacturer to inter-operate and function seamlessly within the user's home AV system. The system of the present invention includes a combination of a base set of generic device controls with an method to extend a base control protocol as new features and new CE devices are deployed within the home AV network. In so doing, the architecture of the present invention is extensible, and can be

readily modified and advanced as market requirements and technology change. The present invention and its benefits are further described below.

NOTATION AND NOMENCLATURE

Some portions of the detailed descriptions which follow are presented in terms of procedures, steps, logic blocks, processing, and other symbolic representations of operations on data bits within a computer memory (see Figure 2). These descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their work to others skilled in the art. A procedure, computer executed step, logic block, process, etc., is here, and generally, conceived to be a self-consistent sequence of steps or instructions leading to a desired result. The steps are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated in a computer system. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

It should be borne in mind, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise as apparent from the following discussions, it is appreciated that throughout the present invention, discussions utilizing terms such as "processing" or "computing" or "translating" or "instantiating" or "determining" or "displaying" or "recognizing" or the

like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system's registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission or display devices.

ARCHITECTURE OVERVIEW

The Architecture of the present invention enables the creation of a Home AV system which provides for seamless support of new devices and problem free interoperability of devices in a home AV network. The most basic components of a system in accordance with the present invention are: a home AV interoperability architecture, a series of home AV interoperability interfaces, and a home AV network. The home AV interoperability architecture is a broad, over arching term encompassing the physical network and the controlling programming interfaces. Interoperability interfaces is a term used to describe the interactions and interfaces of the components of the AV architecture. In addition to providing a common command set, the interoperability interfaces provide a software architecture which allows new devices to be integrated into the network and provide their services in a seamless manner. The home AV network is the term used to describe the physical network and its topology.

It should be noted that the home AV interoperability (HAVI) architecture of the present invention is an open, platform-independent, architecturally-neutral network that allows consumer electronics manufacturers and producers to provide inter-operable appliances. It can

be implemented on different hardware/software platforms and does not include features that are unique to any one platform. The interoperability interfaces of the HAVI architecture are extensible and can be added to, modified and advanced as market requirements and technology change. They provide the infrastructure to control the routing and processing of isochronous and time-sensitive data (e.g., such as audio and video content).

Specifically, the HAVI architecture provides: an execution environment supporting the visual representation and control of appliances; application and system services; and communication mechanisms for extending the environment dynamically through plug and play or otherwise.

It should be noted that the HAVI architecture supports legacy appliances (e.g., appliances that already exist and are available to users). This is important since the transition to more intelligent networked appliances is going to be slow. Most manufacturers will not suddenly begin producing only "intelligent" appliances and most consumers will not quickly begin replacing all of their existing appliances.

In accordance with the present invention, there are two classes of legacy appliances. A first class includes "one-way" or unacknowledged control appliances. A second class includes controllable "two-way" appliances. Examples of one-way appliances are audio/video components controlled by infrared commands of a hand held remote. Two-way appliances provide confirmation of command execution, status and error

reporting. Examples of two-way appliances include the recent introduction of well known IEEE 1394 enabled digital cameras.

It should be noted that the home AV network (hereafter HAVI network) of the present invention provides support to accommodate future appliances and protocols through a write-once, run-everywhere common language. In accordance with the present invention, each appliance includes within it self-describing information concerning the user interface and the device control that can be used by an external controller. This information is specified as programs in the common language.

As described below, the underlying structure for such a network consists of set of interconnected clusters of appliances. Typically, there will be several clusters in the home, with one per floor, or per room. Each cluster will work as a set of interconnected devices to provide a set of services to users. Often, one device will act as a controller for a set of other devices. However, the architecture is sufficiently flexible to also allow a home to consist of a single cluster with no master controller.

For example, in one embodiment of the present invention, an intelligent television in the family room of a user's home might function as the controller for a number of interconnected appliances. Each of the controlled appliances would have self describing data and possibly some associated control code. When these appliances are first connected, the controller obtains the user interface and the control program for the appliance. An icon representing the appliance may then appear on the television screen, and manipulating the icon may cause elements of the

control program to actuate the represented appliance or appliances in prescribed ways. The exception to this model are legacy devices which will have neither self describing data or control code. For addition descriptions and related art regarding self describing data, the reader is referred to Ludtke, et al., A METHOD AND APPARATUS FOR INCLUDING SELF-DESCRIBING INFORMATION WITHIN DEVICES, provisional application number 60/054,327, filed on July 31, 1997, which is incorporated herein by reference.

It should be noted that the HAVI network of the present invention supports "Plug and Play" consumer appliances are easy to install, and provide a significant portion of their value to the consumer without any action on the user's part, beyond physically connecting the cables. This is in distinction to existing appliances that require configuration to provide some major portion of their functionality. The goal is to offer 'hot' plug and play (not requiring the user to switch off appliances) where the connection method supports it safely and reliably.

In accordance with the present invention, an appliance configures itself, and integrates into a system-wide "look and feel" user interface, without user intervention. Low-level communication services provide notification when a new appliance is identified on the AV network. While there will often be settings the user may change to suit his or her preferences, the appliance does not require the user to do so in order to offer basic functionality.

It should also be noted that the HAVI network of the present invention is flexible and supports multiple user interfaces, adapting to both the user's needs and the manufacturers need for brand differentiation. In the AV network, protocols scale gracefully from very resource-rich, intelligent PC-like appliances to "dumb", resource starved appliances (e.g., a coffee maker or thermostat). To achieve this, the AV architecture allows low-end appliances to use the resources of more intelligent appliances in well-defined ways. In a similar manner, the AV architecture allows the specification of aggregate appliances where an abstract appliance is created from a logical collection of several lower-level appliances.

And additionally, it should be noted that the HAVI network of the present invention supports existing standards. The HAVI network is complementary to several existing, well known, industry standards and technologies including: CEBus; Home Plug and Play; EHSI; VESA; Home Network, DAVIC, CoMMeND, Lonworks, USB, IEEE 1394, etc. Accordingly, one goal of the present invention is to provide an infrastructure into which existing devices can fit.

THE SYSTEM MODEL OF THE HAVI ARCHITECTURE

With reference now to Figure 1A, a HAVI network 10a in accordance with one embodiment of the present invention is shown. As described above, the HAVI architecture supports a wide range of devices including intelligent receiver/decoders (IRDs), for example, the set top box 301, digital video tape records (DVTRs), video cassette recorders (VCRs), personal computers (PCs), digital video disk players (DVDs), etc., communicating via a common messaging system. Figure 1A illustrates the physical port-

to-port connecting configuration 10a of an exemplary HAVI network. CE devices ("devices") 12-24 are shown connected together with bus segments 30a-30f. In one embodiment of HAVI, the IEEE 1394 serial communication bus standard is used as a platform to provide the common messaging system.

Figure 1B illustrates a logical bus configuration 10b of the HAVI network of Figure 1A. As shown in Figure 1B, all of the devices 12-24 of the HAVI network can be viewed as logically coupled to a common IEEE 1394 serial communication bus 30. Within this bus configuration 10b, peer-to-peer device communication is supported. For example, as shown in Figure 1C, any device (having appropriate capabilities), e.g., device 12, can send or receive communication packets from any other device in the HAVI network. In the example of Figure 1B, the set-top-box (e.g., an IRD) can receive messages from or generate messages to any of the other devices 14-24 of the HAVI network.

Referring still to Figures 1A and 1B, as described above, the interoperability model in HAVI provides for the following: 1) support for existing devices; 2) a default control model; 3) a means to extend the default control model when new devices or functionality is brought to market; and 4) a common means for device representation (e.g., graphics user interfaces). To achieve the above, the HAVI architecture defines three types of nodes in the home network: Full AV nodes (FAV), Intermediate AV nodes (IAV) and Base AV nodes (BAV).

A Full AV node is a device that contains a complete instance of the AV software model (described in detail below). This type of node generally has a richer set of resources and is capable of supporting a complex software environment. The primary distinguishing feature of a FAV is that it is able to take control responsibility for less sophisticated devices and does this by loading a control module, usually from the less sophisticated device, and executing it locally. Examples of such nodes would be Set Top Boxes (e.g., set top box 301), Smart TV's, general purpose home control devices, or even Home PC's.

Intermediate AV nodes are generally lower cost devices that have limited resources. They do not provide an execution environment for control modules and so can not act as master controllers within the home network. Because they have limited resources, they can access remote resources in one of two ways: by working with other IAV devices who provide some capability they lack, or by using an FAV node which supports a control module to control them. In this second mode of operation they rely on full AV nodes to provide such facilities as a display device, general purpose compute resources and some overall control framework. This allows Full AV devices to bind a variety of intermediate AV devices together to provide a service or abstraction to the user.

Base nodes are nodes that are neither FAV or IAV nodes. These are two generic types: Legacy base nodes, and other base nodes. Legacy base nodes are devices that were built before the advent of the HAVI architecture. These devices often use proprietary protocols for their control, and quite frequently have a simple, well defined, control only protocol.

Such devices can work in the HAVI network but require that a Full AV node act as a gateway. Communication between a Full or Intermediate AV node and legacy devices requires that the Home AV commands used in the HAVI architecture be translated to and from the legacy command protocol. Other base nodes are devices that, for business or resource reasons, choose to implement future proof behavior using uploadable control software and do not carry any of the HAVI architecture or the message communication system. These devices will be controlled by an FAV node with a private command protocol between FAV and BAV node.

With the exception of legacy nodes, each node has, as a minimum, enough functionality to allow it to communicate with other nodes in the system. During the course of interaction, nodes exchange control and data information to enable devices to inter-operate and will do so in a peer to peer fashion. This ensures that, at the communication level, no one device is required to act as a master or controller for the system. However, it also allows a logical master or controller to impose a control structure on the basic peer to peer communication model. Services in the HAVI network are provided by one or more nodes communicating amongst themselves to deliver a service to user or an application. Where it is necessary for a node to interact with a user, then the node negotiates with other nodes to access and use a display device.

Additionally, it should be appreciated that a distinction is made between Logical and Physical nodes. A good example of this distinction can be found in a normal TV set. Although the TV set is generally one physical box, it contains several functional components, e.g. the tuner, audio output

etc. From the system point of view a physical node is an addressable peer node in the system. If the TV is constructed in such a way that its individual functional components are individually addressable, then it is logically one node and physically several nodes. Conversely, if it is constructed to have one addressable entity, then it is both a single logical node and a single physical node.

The IAV devices and FAV devices communicate by sending messages over the home network using a generic message passing system. When new devices join the home network, they are recognized and added to a global name database (registry). The registry holds information about their characteristics and provides a reference to a handler for that device. Other devices and services are able to query the registry to locate a device and then using the handler, can interact with the device. For additional descriptions and related art regarding the communication and identification processes of the present invention, the reader is referred to Ogino, et al., "METHOD AND SYSTEM FOR PROVIDING A DEVICE IDENTIFICATION MECHANISM WITHIN A CONSUMER AUDIO/VIDEO NETWORK", a US patent application filed on 6, Jan, 1998, which is incorporated herein by reference.

When a device is initially added to the home network, the system queries the device to ascertain its characteristics and capabilities. Once a device's characteristics are known, the architecture provides two methods of controlling it. The first method, level 1 interoperability uses a predefined message set. All IAV and FAV nodes can use this command set to access and control other devices (BAV nodes, because they are deployed before the

architecture was defined, are controlled using legacy protocols). The provides a default level of control. The FAV nodes act as control nodes and create a local representation of the IAV node, known as a device control module (DCM) that provides an API used to send control commands to the device.

Level 2 interoperability within HAVI goes farther and supports future added functionality and new devices. To achieve this, a particular device can carry within its ROM, an override DCM that is uploaded from the IAV device, to the FAV device and replaces the default DCM for the particular device. This override DCM not only contains the basic level 1 command set for the particular device but also includes vendor specific commands to control advanced features of the device. The model allows the device to inform another about its particular functionality. Since the override DCM may be loaded onto any vendor's FAV, the format of the DCM is architecture-neutral.

To allow one device to discover the capabilities of another device and to determine which command set to use with that device, a standard device description structure is provided called the self describing data (SDD) structure. The SDD data structure is extensible. It can be a small number of bytes describing the device type, e.g., TV, or VTR, etc. Alternatively, the SDD data structure can be a more complex structure also defining the override DCM and a graphical representation of the device. The graphical representation within the SDD data structure allows an FAV node to present a pictorial representation of the devices in the home network to users. By defining the graphical representation in a sufficiently generic

manner, a device's SDD graphical data can be used in any vendor's product to display a user interface for that device. This provides an enhanced level of vendor interoperability and also allows a vendor to differentiate a product while maintaining within the general look and feel of the display device. This enables a control device (the FAV node) to present a general control user interface for all devices in the home network, irrespective of the differences in type and vendor.

As described above, Legacy devices are devices that were built before the HAVI architecture or devices that select not to use HAVI. HAVI supports Legacy devices by providing Legacy DCMs to provide protocol conversions for Legacy devices. These Legacy DCMs can contain sufficient knowledge to allow them to support an existing 1 or 2 way control protocol and provide a specific control interface to the devices that conform to HAVI. A legacy DCM acts as a bridge between the Legacy and HAVI devices. This approach allows HAVI also to interact with any future device control protocols such as protocols being used for home energy management or security.

It should be appreciated that the communications hardware and protocols used by the HAVI architecture are non-specific. The HAVI architecture is readily suited to the incorporation and use of any one of several communications mediums, with the simple requirement that the medium provides a generic communication mechanism that supports the HAVI interfaces. The basic model assumed is one of a logical communications back plane (e.g., IEEE 1394). All AV devices are assumed to be connected to this back plane, and can locate and communicate with all

other AV devices, as shown in Figure 1B. In a physical setting, it is likely that this logical back plane will consist of more than one physical communication medium. It is further assumed that multiple protocols may be in use on different physical media. The Home AV architecture abstracts above all of this and presents a generic model of communicating nodes. It will provide a mechanism above the Transport layer (functionally like a socket) to ensure network transparency. This mechanism can be described as "reliable, ordered datagram service" which will provide all fragmentation and re-assembly.

Accordingly, a goal of the present invention is to support each and every physical bus the same, such that an application need not care which physical transport it is using. However, with the familiarity of IEEE 1394 in the electronics industry, features of the present embodiment are illustrated and described in view of functioning with IEEE 1394. Other buses such as CEBus and USB may not require all the same features.

Referring now to Figure 2, an exemplary peer to peer, two IAV node HAVI network 200 in accordance with one embodiment of the present invention is shown. HAVI network 200 includes a first IAV 201 (e.g., a television) coupled to a second IAV 202 (e.g., a receiver). IAV 201 and IAV 202 behave in a peer-peer manner, arbitrating for necessary resources amongst one another. They lack the resources to support the addition of a BAV or LAV device, but can perform meaningful activities within their context. The IAV is not required to provide any standard UI capability. There is no provision in the AV Architecture for "forward compatibility" or discovery of new functions (e.g. IAV 201 only knows the functions that IAV

202 supports based on SDD provided upon connection of IAV2). However, in accordance with the present invention, the features of the SDD can be easily exploited to perform "ad-hoc" feature discovery.

Figure 3 shows a single FAV cluster HAVI network 300 in accordance with one embodiment of the present invention. HAVI network 300 includes an FAV 301 (e.g., a set top box) respectively coupled to a first LAV 302 (e.g., a television) a second LAV 303 (e.g., a VCR) and a BAV 304 (e.g., a digital camera). In HAVI network 300, FAV 301 controls Legacy and Base AV devices (e.g., devices 302-304), providing cluster-wide services.

Figure 4 shows an FAV cluster integrated with an IAV peer to peer HAVI network 400. In accordance with the present invention, the configuration of HAVI network 400 provides support for legacy devices 302 and 303 while enabling independent control to occur within the two IAV devices 401 and 402 when their resources are not in use by the FAV device 301. The IAV devices 401 and 402 behave as peers to the FAV device 301. For efficiency, a resource conflict policy can be implemented for both FAV to FAV or FAV to IAV resource requests. The IAV will be controlled by the FAV by via a DCM running in FAV 301.

Figure 5 shows an exemplary HAVI network 500 having multiple FAVs. HAVI network 500 includes an additional FAV 501 (e.g., a satellite receiver). This configuration behaves in a similar manner to HAVI network 400 described above. In this configuration, the FAV devices 301 and 501 act as peers.

THE COMPUTER SYSTEM PLATFORM

With reference now to Figure 6, a diagram of a set top box 301 in accordance with one embodiment of the present invention is shown. As described above, any consumer electronics device can be a FAV and thereby provide a computer system platform for HAVI software. For instance, the set-top-box 301 device of the exemplary HAVI network contains special components that provide an operation platform for software components of the HAVI architecture which are described below. Specifically, aspects of the present invention, described below, are discussed in terms of steps executed on a computer system (e.g., processes shown in Figures 13 through 17A). Although a variety of different computer systems can be used with the present invention, an exemplary general purpose computer system is shown in the set-top-box of Figure 6.

Set-top-box 301 of Figure 6, in addition to having a video/audio receiver (decoder) unit 606 and MPEG unit 607 also includes an address/data bus 600 for communicating information, one or more central processors 601 coupled with the bus for processing information and instructions, a volatile memory 602 (e.g., random access memory RAM) coupled with the bus 600 for storing information and instructions for the central processor 601 and a non-volatile memory 603 (e.g., read only memory ROM) coupled with the bus 600 for storing static information and instructions for the processor 601. Set-top-box 301 can also optionally include a data storage device 604 ("disk subsystem") such as a magnetic or optical disk and disk drive coupled with the bus 600 for storing information and instructions. Also included in the set-top-box 301 is a bus interface unit

608 for interfacing with the local bus 30 (e.g., an IEEE 1394 serial bus). Set-top-box 301 can operate under a variety of different operating systems (e.g., Windows operating system, DOS operating system, Macintosh O/S), but in the present embodiment the Aperios operating system is used.

5

THE HAVI SOFTWARE MODEL

In accordance with the present invention, the computational units of the HAVI architecture (e.g., DCMs) are modeled as objects. Each object is a self contained entity, accessible through a well defined interface and

10 executing within a well defined software execution environment. The software execution environment (e.g., set top box 301 from Figure 6) provides a set of well defined services (locally or remotely) that are also modeled as objects and can be accessed, using the communications infrastructure, via their well defined interfaces.

15

Each object is uniquely named. No distinction is made between objects used to build system services and those used for application services. All objects make themselves known via the registry. Objects in the system can query the registry to find a particular service or device and can use the

20 result of that query to send messages to that service or device. The identifier assigned to an object is created when the object registers. This identity, if required, is guaranteed to be persistent during the lifetime of the object and will remain persistent even in the face of a complete reboot of the home network.

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In accordance with the present invention, the objects communicate using a message passing model. An object that wishes to use the service of

another object, does so by using a general purpose message passing mechanism that delivers the service request to the target object. The target object is specified using the unique object identifier discussed above. While in the present embodiment the message passing mechanism functions with IEEE 1394, it should be noted that there is no distinction between sending a message across a 1394 bus, or over a Control A1 link. In the same manner, there is no distinction between objects on the same node and one on a remote node. The actual implementation of the message passing infrastructure will depend on the system and networking environment and will differ from node to node and between vendors. However, the actual format of the messages must be common so that interoperability is assured.

It should be appreciated that the general intent of the object model and messaging system is to provide a completely generic software model that is sufficiently flexible to allow multiple implementations with a variety of software systems and languages. Details of the binding between messages and the code that handles them are left to the system implementor.

SOFTWARE ARCHITECTURE OVERVIEW

The HAVI software architecture defines the way that the software model is used to support the HAVI architecture. In particular it defines the way that devices are abstracted and managed within the AV architecture. It defines the ways that interoperability is assured, and it defines the ways that future devices and services can be integrated into the architecture.

Full AV nodes as software managers: In accordance with the present invention, Full AV nodes (FAVs) act as managers for Intermediate (IAVs) and Base (BAVs) nodes and provide a platform for the services that support the HAVI architecture. To achieve this they provide an execution environment which allow objects to control and communicate with services and devices. To ensure that devices are accessible within the Home AV network, the FAV nodes support a software abstraction of the services that a device offers to others. As described above, this abstraction is referred to as a device control module (DCM). The DCM is modeled as an object within the software architecture but is refereed to hereinafter simply as the DCM to distinguish it. The interface that the DCM exposes to the rest of the system provides the means to access and control that device. In the general case, a FAV will manage a set of DCMs, one for each IAV node and base node in the home network or portion of the IAV network that it manages. Thus, it should be appreciated that from an interoperability perspective, the primary role of the FAV node is to manage DCMs of the present invention and act as an execution environment for DCMs.

Full AV node as controller and display device: In accordance with the present invention, in most cases, FAVs will have an associated display device which is used for display of AV content and of user interface (UI) material. However, the HAVI software architecture does not mandate this and FAV nodes may be "headless". In this case they will cooperate-operate with other nodes to display content and UI information (see below). However, FAV devices will be responsible for supporting the high level UI APIs that provide the look and feel of the entire home network. The lower level graphic manipulation APIs will generally be located close to the

graphics display device itself and are manipulated by the FAV high level APIs.

Peer to peer architecture between full AV nodes: In a Home AV network in accordance with the present invention, there may be more than one FAV. In this case, each FAV cooperates with other FAVs to ensure that services are provides to the user. This allows FAV nodes to cooperate to share resources. For example, an FAV node that does not have direct access to a display device, may use a remote FAV node to display DCM user interfaces. Alternatively, a FAV node may require the services of a data translation module that exists on a remote node to allow it to set up a data route between two AV devices.

LEVEL 1 AND LEVEL 2 INTEROPERABILITY GENERALLY

In accordance with the present invention, one of the major goals of the HAVI architecture of the present invention is to support interoperability between devices. This includes existing devices and future devices. To achieve that interoperability, the HAVI architecture of the present invention supports a general model that allows two levels of interoperability. These levels are referred to as Level 1 and Level 2.

Level 1 interoperability: Level 1 interoperability of the present invention addresses the general need to allow existing devices to communicate. To achieve this, level 1 interoperability of the present invention defines and uses a generic set of control messages (commands) that enable one device to talk to another device and a set of event messages that it should reasonably expect from the device. To support this approach

a basic set of processes are required. These processes include device discovery, communication, and a generic message set.

The device discovery process of the present invention provides for the fact that each device in the Home AV network needs a well defined method that allows it to advertise to others its characteristics. The approach we have adopted is to specify a data structure, required on all FAV and IAV devices, that contains information about the device and which can be accessed by all other devices. This data structure is referred to as a Self Describing Data structure (SDD). The SDD contains, as a minimum, enough information to allow another device to discover its basic capabilities and so infer the basic set of command messages that can be sent to that device and events it should reasonably expect to receive from that device.

The communication process of the present invention provides for the fact that once a device has determined the capabilities of another device, it then needs to be able to access those capabilities. To achieve that requires a general communication facility that allows one device to send a message containing a command request to another device. The general message service processes of the present invention were discussed above.

Generic message set refers to the process required to support level 1 interoperability. This includes a well-defined set of messages that must be supported by all devices of a particular class. This ensures that a device can work with other devices, irrespective of the manufacturer, because all devices agree to a common set of generic commands. As discussed above,

within the HAVI software architecture of the present invention, these commands are presented as a DCM to the rest of the system.

These three basic processes of the present invention support at least a minimal level of interoperability. Since, in most cases, any device can query the capabilities of another via the SDD, any device can determine the command set supported by another device. And since each device has access to a generic messaging system, then any device can interact with any other device.

However, it should be appreciated that level 1 compatibility in accordance with the present invention only ensures that devices can inter-operate at a minimal or degraded level of functionality. The generic message set for each device class is a minimal and common set of commands. The SDD facility offers a means to provide some degree of customization of a device by providing information about its UI and some aspects of its interaction model. Other IAV devices can use this information to present an interface to the device. Alternatively, any FAV device can use this information to customize the generic DCM it has created for the device. However, it should be noted that a more extensible mechanism is also needed to allow a device to communicate to other devices any additional functionality it posses. Level 2 interoperability of the present invention provides this mechanism. Level 1 and Level 2 interoperability are discussed in greater detail below.

LEVEL 1 AND LEVEL 2 DCMs

As described above, the DCM of the present invention functions by providing access, control and interaction with a device. DCMs are typically instantiated (e.g., executed) on the resources of FAVs in the Home AV architecture. The DCM of the present invention provides an interface to a device and manages a UI that the device wishes to present to users.

In accordance with the present invention, with the level 1 interoperability, the DCMs created for devices are generic. They support a minimal command set that allows generic control of the device. To support device specific features requires that the DCM provide access to such device specific features and is capable of presenting device specific features to users via the UI.

To achieve this, Level two interoperability is used. In accordance with the present invention, the Home AV architecture allows a device to provide an "override" DCM for the generic DCM that would normally be created for that device. The override DCM (e.g., level 2 DCM) is capable of replacing the default DCM (e.g., level 1 DCM) on the FAV. It should be appreciated that the level 2 DCM could be retrieved from a variety of sources. One such source is the SDD of the device itself. In this case, the level DCM is fetched, received, or otherwise acquired from the SDD of the device and instantiated in an FAV node when the device is installed into the system. Because the Home AV architecture is vendor neutral, it is necessary that the level 2 DCM work on a variety of FAV nodes, each with potentially different hardware architectures. To achieve this, the format of both the level 1 and level 2 DCMs of the present invention are architecture

neutral such that a wide variety of software execution environments of the FAV nodes are able to instantiate and run the level 1 and level 2 DCMs.

It should be appreciated that, in accordance with the present invention, once created and running within a FAV node, the DCMs of the present invention communicate with the IAV and BAV nodes in the same manner as described above using the basic messaging mechanism.

As described above, there are many permutations of FAV, IAV and BAV nodes possible within a given HAVI network. These permutations generally fall into two types: HAVI network configurations that support an FAV device, and those that do not. This distinction essentially defines whether a HAVI network will be using a peer to peer configuration (e.g., as shown in Figure 2, where no FAV is present) or will be imposing some form of control hierarchy (e.g., the FAV cluster as shown in Figure 3).

In accordance with one embodiment of the present invention, in the cases where no FAV is present, only level 1 interoperability is available and the devices are forced to use SDD information to discover other IAV capabilities, present those capabilities, and control the device. In the cases where FAVs are present, DCMs are instantiated and uses. If these are level 1 (e.g., generic) DCMs, the devices are operating at level 1 interoperablity. If there is at least one level 2 DCM present, then some of the devices are operating at level 2 interoperability.

In accordance with the present invention, it should be noted that a mixed mode of operation is possible in which clusters of devices are inter-

operating under control of an FAV node, while other devices are inter-operating in a peer to peer fashion. In this manner, the flexibility of the present invention allows vendors the freedom to design and build devices ate all points on the cost/capability spectrum with the certainty that these devices will inter-operate seamlessly with other devices in the HAVI network.

Referring now to Figure 7, a logical block diagram 700 of one embodiment of the HAVI architecture is shown. Figure 7 shows an overall HAVI architecture in accordance with the present invention. The components shown in diagram 700 are as follows:

Device manager 761: Device manager 761 is responsible for creating and managing the DCMs that represent devices managed by an FAV device.

Device Modules 720: These are the DCMs for individual devices. As described above, each DCM functions as a control point for a device and provides a UI component and a control component. The DCMs (e.g., device modules 720) provide an API to allow other applications to access and manipulate the devices.

Service Modules 730: These modules can be viewed as software devices They are DCMs for any software component (as opposed to a hardware device) that provides a general service to other devices or components in the home network.

Comms Media Manager 740: This component is responsible for managing the underlying physical communications process. It provides

an API that allows code modules to interact with the features of the communications media (e.g., IEEE 1394).

Registry 706: This is a service database. All DCMs for physical devices and software services will register themselves in the registry 706 and all modules (e.g., device modules 720) can query the registry to get a handle for another device or module.

Communications manager 750: This component is a low level abstraction of the communications media.

Messaging 702: This component provides a basic message passing facility to allow both devices (hardware) and device modules 720 and service modules 730 to communicate with each other.

Event Manage 703: This module provides a generic event service. This is a one-to-many communication service allowing notification in the HAVI network.

Initialization manager 701: This component is used as part of the device bootstrap process.

Data routing 762: The data routing component 702 is responsible for helping services set up routes between devices and devices modules. It takes into consideration the 'cost' of transferring data via a particular route, the requirements on data format translation etc. This component is not needed for the basic architecture.

AV Actions/Macros 763: this component is a manager for higher level AV actions which are groups of individual low level commands, i.e. it provides a macro service. This component is not needed for the basic architecture.

High level UI library 704: This component provides a set of high level UI components that are used by device modules 720 to build UIs for their

corresponding devices. This component is not needed for the basic architecture.

Application (and User) interface 705: This component provides the linkage between a common consumer electronics platform (CCEP) APIs of the HAVI compliant devices and applications which are local or possibly remote. This component is not needed for the basic architecture.

It should be appreciated that the above components as diagrammed in Figure 7 are abstractions of functionality. They are designed to make clear what functionality is included in the architecture for HAVI compliant devices. In order to avoid unnecessarily obscuring the present invention, the relationship between components 701-763 and the message flows between them are not shown.

DCM CONFIGURATION AND FUNCTION

Overview

In one embodiment of the present invention, in HAVI network configurations where a FAV node is available, a DCM exists for each physical device in the HAVI network known about by that FAV node. The DCM provides an interface to the device and presents it as an object in the architecture. Other DCMs, system services or application services can query the local registry to find out the devices available and to get an identifier to allow them to interact with the devices via its DCM.

Device control modules are also responsible for interacting with the software architecture to present the device user interface (UI) to the user.

Input from users is then passed to the DCM which uses the input to control the actual device.

As discussed above, DCMs support the level 1 and the level 2 interoperability. A level 1 DCM is a generic DCM, usually supplied with the FAV node, and capable of managing a basic, pre-defined set of features of a device class using a pre-defined message set. During initialization, the DCM will work with the Device manager (below) to discover the actual characteristics of the device to be managed, and will configure itself to control that device. Thus a generic VCR controller could be instantiated to control a standard VCR using either 1394 AV/C messages, or via Control A1.

In the case of level 2 interoperability, the DCM instantiated for that device will be an override DCM that has been loaded from an external source, e.g. the device itself. These override DCMs are written in the common language format for DCMs. The functioning of an override DCM doesn't differ from generic ones but the API offered is likely to be more comprehensive.

Once instantiated, DCMs will provide not only control interfaces for the device, but also access to SDD data associated with a device. They will act as event managers for a device, receiving device specific events and posting those to the event system (see below). They will also act as UI manager for the device, interacting with the UI management system to provide a user interface via some display device. Lastly, the DCM will

operate as a resource manager for devices, arbitrating requests made for device access and service.

General DCM terminology

In the terminology of the present invention as used in the following descriptions, each DCM presents a model of a device in the home network. The basic terminology used is as follows:

1) Device: This term refers the entire device.

2) Subdevice: This term refers to one of possibly many components that make up a device. Some technologies do not have the ability to distinguish subdevices.

3) Internal Connection: This term refers to the logical or physical connection between internal subdevices.

4) External Connection: This term refers to the connection between a physical connector on the outside of a device and a destination device outside the device. The same as unit Serial Bus and external input and output plugs for AV/C.

5) Protocol: This term refers to the control protocol spoken by the sub-device or device (e.g., AV/C, Control A1, etc.). It should be note that a device may contain subdevices which speak different protocols.

6) Interface: This term refers to the physical bus connection interface (1394, USB, etc.).

7) Device Class: This term is one way to describe the basic functionality of a given collection of devices. For example, the class of DVCR devices can record data to a tape medium. Likewise, there may be many devices that can take audio input, perform some kind of special

effects, and output the modified audio stream. These would all come under the class of audio processor or something like that. The usefulness of this concept will become more apparent later in the document.

8) Device Model: This term refers to the collection of subdevices and connections that make up either a standard or custom device definition. Individual subdevices that are accessible within physically separate devices can be combined to form logical or virtual devices using the device model.

9) Standard Device: This term refers to standard model definitions (e.g. a DVCR device is composed of at least a tuner subdevice and a VCR (transport) subdevice, with plugs between them).

10) Special Device: This term refers to a vendor-specified device model, composed of either standard subdevices or a combination of standard and vendor-specific subdevices. For example, a dual deck DVCR may have two VCR subunits, which are standard items, but in a non-standard configuration.

11) Aggregate devices: This term refers to logical entities which can be combined from a variety of components. Physical devices and subdevices are individually accessible pieces of hardware. When devices have accessible subdevices, this model is extended to support aggregate devices. Examples of aggregate devices include subdevices from separate physical devices or within a single device, and software modules such as software codecs which provide services or capabilities similar to devices and subdevices. These modules can all reside in the same node on the AV network, or can be distributed among many nodes..

Device classification

Classifying devices based on the kind of actions they perform, or the kind of medium they deal with, is a way of allowing us to create a generalized control API that will work for devices that are created in the future. The intent is to allow a high percentage of basic functionality to always be accessible regardless of the type of device or the manufacturer of the device.

Any manufacturer-specific or device-specific functionality that is controllable as well but falls outside of the generalized control API will only be accessible via the SDD information and other techniques for extending a DCM.

In the most general terms, the classification of devices or subdevices can be described by their main functionality. The AV/C control protocol of the 1394 standard uses a convenient method of classifying devices which we have adopted below. Following is the first set of factors used for classifying a device or subdevice:

1) Whether a particular device has a transport mechanism.

2) Whether the usefulness of this subdevice defined mostly by the fact that a signal ends up here (regardless of the fact that it may be propagated without changes).

3) Whether a particular subdevice a signal source (e.g., does it have a signal output).

4) Whether a particular device accepts input, performs some sort of processing, and then outputs modified data.

5) Whether there is no signal input or output of any kind (e.g., is the device a utility of some kind, such as a mechanism for positioning a satellite antenna).

In accordance with the present invention, at a second level of classification, we can study devices that contain a transport mechanism. In this case, a general question would be "does this device deal with removable media?". If it does, then a basic set of controls is applied, such as Play(), Stop() and even Search(). Devices with media can be queried for their ability to record, to determine the organization of information on the medium (is it track-based? continuous such as a tape? how is it measured - SMPTE time codes, time offset from a certain position, etc.).

In the present embodiment, a signal processing service can be described by the kind of signal(s) it can accept, and the kind it can produce as a result. This requires the establishment of common definitions for describing signal types and methods for accessing the services, so that any client can know how to describe what kind of service it is looking for, and how to access that service.

Any device which accepts one kind of data and has the ability to transmit that data on a different type of connection (for example, it takes digital video as input and has standard analog video RCA jacks which can send that data back out) can act as a data converter class. The DCM for these devices will register itself as a data converter in the system registry, so that clients can find them and use them as necessary.

Device access and control

In accordance with the present invention, once a basic device classification has been made, then the generic DCM instantiated for that device will provide an API that causes control messages to be sent to that device. The base set of control messages that can be sent or received (in the case of events) to a particular class of device are standardized and detailed in the appendix (not available in this version of the document). In the present embodiment, these messages represent a basic API presented by the DCM.

Device management

In accordance with the present invention, the DCM API also provides a set of higher level services that allow more sophisticated management of the device. Examples of this include device reservation and event management. In the case of device reservation it is likely that a request for a device may be refused due to existing requests on the device, alternatively, the device request may be for a future reservation for a time based macro. In these cases the DCM provide an interface to allow an application or service to queue requests with the DCM, i.e. reserve a device, or to receive notification when a device becomes available.

Connection management

The DCMs of the present invention also provide a high level API to allow other objects to query the state of connections between devices and to manipulate those connections. This API is primarily used by the Route manager but is available to any object in the system. Connection management allows connections to be established, both internally between

subdevice units, and externally between devices. Connection status can be queried and connection capabilities (signal formats) can also be queried.

SDD management

The DCMs of the present invention also provides a generalized interface to SDD management. This allows the SDD data in the device to queried and used. The API is divided into two parts, part 1 provides APIs for getting well know information from the SDD data including the DeviceImage, its name and the URL (if available) of a location for an override DCM or other icons to be used in representing the device's UI. Part 2 of the SDD API is designed to provide more detailed access to functional aspects of the device.

Device representation and user interface (UI)

In accordance with the present invention, the DCM is also responsible for the UI aspects of the device. In the case of level 1 interoperability, a generic UI is used to interface with users. This may be augmented by basic SDD data that allows such aspects as UI icons to be specified and accessed by the generic DCM. In order to avoid unnecessarily obscuring the present invention, the details of how the DCM interacts with the UI management system to present a device specific UI is not discussed in detail. In the present embodiment, however, the basic model is that internal management code within the DCM works with the UI management system to present a UI for the device. User input is then forwarded by the UI management system, to the DCM which then converts it into device specific commands. These commands are sent, using the basic messaging system, to the device. If replies are received then these are

passed via the DCM up to the UI. In addition, any status changes of the device, e.g. on/off are also passed, via the event system to the DCM which uses them to update the UI.

Service Modules

Service modules (e.g., service modules 730) are conceptually similar to device control modules. They provide an interface to a service which is usually provided by software only. In the present embodiment, service modules are of two types, system services and application services. A system service is a well know service that is provided as part of the HAVI software architecture. Examples of these types of services are data format translators, protocol converters or graphics services. These services have well known APIs which are defined as part of the HAVI architecture. Application services are objects that have been created for and by other service objects. These objects provide a well defined API, however that API is not public. In the present embodiment, any application or other object that wishes to use an application object needs to know its API and calling semantics. Although not required, generally, system services will exist for the lifetime of the system. Application services will exist for the lifetime of an application and may be quite short lived.

System services

In accordance with the present invention, many of the services provided by the AV architecture are provided as service modules, who register their services in the system registry and can be accessed using messaging. Examples of such services are the UI service modules that

provide a mechanism to allow devices to present a UI to the user, data format services that convert AV data between different formats.

THE DCM MANAGER

Overview

In accordance with the present invention, the DCM Manager is responsible for all aspects of handling the collection of DCMs resident on a FAV node. This includes the tasks of discovering, instantiating and disposing of all possible device control module candidates that are available to a given system. Device resource management is generally carried out by individual DCMs, however, where multiple devices or services are interacting and where some of the DCMs are located on different FAV nodes, higher level management will be needed. Therefore, the DCM Manager communicates with other DCM Managers on remote nodes to arbitrate for network-wide device and subdevice resource allocation and management. Its responsibilities are discussed below.

Discovery and enumeration of physical devices

In accordance with the present invention, the DCM Manager works with the underlying OS services to obtain a raw list of available devices. Note that depending on the underlying bus technology, these DCMs may be dynamic. In the present embodiment, for example, as physical devices come and go on a 1394 bus the DCMs will come and go with them. In the same manner, the service and aggregate device DCMs are also dynamic, being created and destroyed in response to events in the FAV node.

This task requires interaction both with elements of the AV architecture and also with elements of the FAV host OS, node hardware and communications hardware. Due to this, the exact process required for device discovery will depend on the system environment. However, the general approach, of querying a device and any SDD data it contains to discover its characteristics, as discussed in the DCM section, is common. In the present embodiment, this requires the DCM manager to follow a set of rules in a given sequence each time the system is initialized, or any time the system may change (such as when the bus is reset).

Creation of Generic DCMs

In accordance with the present invention, for each node, the DCM Manager does enough work to determine that it should create a DCM. This work is carried out for all media-related devices which will be managed by the FAV node. In the present embodiment, Devices under a different management technology, e.g. USB based devices, may be presented within the architecture as DCMs on nodes that support USB communication, or as special DCMs that act as proxies for a remote management system. It should be noted, however, that some USB-based devices such as hard disks may in fact be made to appear simply as random-access media recording or playback devices; in these cases, they are treated like any other "real" media device. In the present embodiment, for each media-related entity, the DCM Manager will create a generic or level 1 DCM. Each DCM will later have the responsibility to make itself more device-specific if possible. This is described below.

Integration of level 2 DCMs

In cases where an over-ride (e.g., level 2) DCM is available and accessible, the DCM manager is responsible for attempting to fetch that DCM and installing it into the FAV node. In the present embodiment,, the details of how the over-ride DCM and the generic DCM interact is dependent on the DCM developer. For example, in some cases it will completely replace the default DCM, in others it will work with the default DCM to augment its capabilities.

In accordance with the present invention, manufacturer-supplied level 2 DCMs may come from a variety of sources. Devices may carry them within their ROM or some other storage mechanism such as the header of a disc or tape. They may be downloaded from a web or ftp site if such capabilities are accessible to the FAV node, or they could be supplied in the typical computer industry manner, via an installation from a disk or other storage medium. Allowing this manufacturer-supplied over-ride DCM capability requires a model for creating and installing DCMs. In the present embodiment, when installed, the level two DCM will provide the same base interface to the client as a level 1 DCM, while either providing additional interfaces or just underlying functionality modifications.

DCM Disposal

In accordance with the present invention, the DCM Manager will be responsible for disposing of DCMs at the appropriate times, and notifying clients that DCMs have been removed. In the present embodiment, the rules for when DCM disposal occur, and the distribution of responsibility for clean up, between the DCM and the DCM Manager, are tailorable to for the specific requirements of a particular HAVI network.

Coordinate Amongst Multiple DCMs

Some complex services among multiple DCMs, for example, command queuing of complex operations, etc., require the DCM Manager to coordinate with multiple DCMs to carry out these operations. This will be influenced by the "command model" that is provided for clients. For example, if we define an upper level API that allows clients to specify actions that are based on HH:MM:SS:FF time codes, then we need to translate between this time model and whatever the hardware or underlying support modules deal with. It should be noted that complex time-based operations that are affected by mechanical delays, etc., need to be accounted for. This type of coordination requires some notion of real time behavior in the network and is dependent on the physical and software infrastructure providing some level of guarantee.

Referring now to Figure 8, a layered logic diagram 800 of one HAVI architecture in accordance with the present invention is shown. The components shown in diagram 800 are similar to those shown in diagram 700, however, diagram 800 is organized such that high level processes are on top (e.g., applications 801) with respect to lower level processes on the bottom (e.g., 1394 module 830). Diagram 800 also depicts other services 810, transportation adaptation modules 815, and other modules 840.

As described above, the overall HAVI architecture can be shown as communications components and service components. Applications 801, at the highest level in the architecture use the services and the communication components (e.g., DCMs 720, service modules 730, etc.). In

turn, a number of the service components (e.g., service modules 730, DCMs 720, etc.) will use the underlying communications components (e.g., messaging 702, transportation adaptation modules 815, etc.). For example, in the case of one of applications 801 requesting, via the registry 706, the handle for a DVTR (digital video tape recorder) device, and then sending a play command to the device. As described above, components in the HAVI architecture communicate using the underlying messaging system, i.e. the modules use message passing.

Figure 9 shows a diagram 900 of local and remote messaging in the HAVI architecture of one embodiment. The messaging component 702 is shown handling both local messaging and remote messaging. Hence the messaging component 702 is depicted at the base of diagram 900. Local messages are shown as arrows 902a, 903a, 904a, to various applications 901-904. A remote message is shown as arrow 901b. For the sake of clarity, in diagram 900 and in the following discussions, local communication via the messaging system is not depicted, rather, local messaging (e.g., arrows 901a-904a) are shown as if based on direct function calls between components.

Figure 10 shows a diagram 1000 of a message being sent via 1394 in the HAVI architecture of one embodiment. In diagram 1000, message 1 (e.g., arrow 820a) is a request from one of applications 801 to the registry 706 (via the query API) for the handle of a DVTR device. The registry 706 returns a handle for the DVTR DCM in message 2 (e.g., arrow 820b). This handle is the message address used for the messaging system.

In accordance with the present invention the application then uses the handle to invoke the DCM for the DVTR with message 3 (e.g., 820c). The DCM converts the application invocation of the play call to an internal command which is sent to the messaging component, message 4 (e.g., arrow 820d). This internal command is part of the well defined command set at level 1, i.e. it is a HAVI command. The messaging component 702 then internally uses the handle information to determine which bus this device resides on. When it discovers that it is on the IEEE 1394 bus, it uses the IEEE 1394 transport adaptation module (TAM) 830 to convert the message to a 1394 packet, message 5 (e.g., arrow 820e), which is placed in the data portion of a FCP packet. The TAM then calls the 1394 device driver, message 6 (e.g., arrow 820f) to send the message over 1394.

At the receiving side (not shown), the message will be delivered to the 1394 device driver, and then passed up through a 1394 TAM to the Messaging component. The messaging component will receive a HAVI message packet which it will then deliver to the receiving code directly via a message queue or callback function. In the present embodiment, if the receiving device is an IAV device, it will only have the communications component of the CCEP architecture and the registry. Any other functionality it has will be device specific.

It should be noted that the previous example in Figure 10 illustrates a distinction in the HAVI architecture between the messaging system and the command set used to control devices. In accordance with the present invention, the messaging system is a generic messaging mechanism that provides a message packet with a data section whose contents are

completely opaque to the messaging system. For example, the messaging system can carry private application to application commands, AVC-CTS commands, CAL commands or any other command. The DCM is the entity responsible for communicating with remote devices, it uses the messaging system to carry commands specific to that device. For a level 1 HAVI compliant device, the command set carried by the messaging system is defined as part of the CCEP architecture. Messages carried by the messaging system between DCMs and devices they control contain these well defined commands. For level 2 devices the extended command set is undefined, these may be pure AV/C-CTS, CAL or any other commands.

Referring now to Figure 11, a diagram 1100 of an application invoking another application in one embodiment of the HAVI architecture is shown. Diagram 100 shows an application 801a running on a device 1101 passing a message 1105 to an application 801b running on a separate device 1102 via messaging systems 702a and 702b. As described above, any application running within the HAVI network can access any other application if it has a message handle for that application. To acquire a message handle, the same process is used as for a remote IAV device (e.g., described in Figure 10 above). Once a message handle is available, the source application 801a can send a message 1105 to the target application 801b. As described above, the format of these messages is entirely dependent on the application and is of no concern to the CCEP architecture. It simply provides a communication mechanism to send a receive messages between the applications.

It should be appreciated that in the above example, it is assumed that the applications 801a and 801b reside on different AV devices 1101 and 1102. However, as discussed previously, it is quite possible that these applications 801a and 801b will reside on the same AV device and so the messaging system will perform a purely local communication call rather than a call that uses 1394 to transport the message.

Invoking a software service

A software service is a special case of the generic application case above. In accordance with the present invention, a software service is simply an application that is part of the system infrastructure. In this case, when a module wishes to invoke a system service, e.g. the UI component, it uses the messaging component to do this. If the UI component is local then the call is contained entirely within one AV device. However, if the UI component is remote, then the call will be routed over the 1394 network to the remote AV device, where the message system will dispatch the call to the UI system service.

Adding a new device to a HAVI network

In adding new devices to a HAVI network, there are 3 general situations: handling a legacy device using a legacy protocol carried over a non 1394 network; handling a base device using a non HAVI protocol over a 1394 network; and handling a new IAV device that is HAVI compliant.

In the case of adding a legacy device, in the present embodiment, a legacy device can only be directly controlled by an FAV node. As described above, for each legacy device, a legacy DCM must be created. Consider an

FAV that has a 1394 port and an Ethernet port. The CMM module will have been configured to manage both 1394 and Ethernet. When the legacy device becomes know to the FAV, it will first become known at the CMM module. Note that the mechanism used to achieve this is not within the scope of the CCEP architecture. It is communications media specific. Once the CMM recognizes a new device, it will go through whatever media specific mechanism it uses to determine the type of the device. Again this is not part of the CCEP architecture. Eventually it will ask the DM to instantiate a legacy DCM for this device. It is assumed that the FAV node has been pre-configured with this DCM.

In the present embodiment, once the DCM is created, it registers itself in the same way as any standard DCM. However, one crucial difference between this DCM and other DCMs is that the communication model and the command set used to control the legacy device is completely unknown to the CCEP architecture. For example, it is possible that the device is an IP device that implements a printer service. In this case the DCM will provide a set of commands such as Print, Status etc. When an application calls the DCM API with a print request, the print command will be sent out by the DCM, via an IP stack, to the printer device. The actual details of how this happens are implementation specific.

In accordance with the present invention, one possibility is that the legacy DCM has a full implementation of the IP stack within the DCM and knows how to bind to the Ethernet device driver. Another possibility is that the FAV device provides an IP stack and a higher level API such as sockets. These are FAV implementation details and not part of the CCEP

architecture. However, it should be noted that the legacy DCM is acting as a "proxy" DCM. Once it has been registered in the registry, it is visible to all other modules in the home network. They can all invoke its API and it performs the necessary conversion to the private command language of the Ethernet IP printer.

In the case of adding a base AV device, in the present embodiment, when the CMM is informed about the new device, its recognizes that this is not a CCEP node, but it also discovers that a DCM is available for this device. In this case, the CMM is responsible for implementing a mechanism that allows it to upload the DCM and to ask the DM to create this DCM. However, once the DCM is instantiated then it uses a purely private communication mechanism to access and control the device. As described above, in the present embodiment, a base AV device is one that uses 1394 and implements the over-ride DCM but does not implement any of the CCEP architecture and will not implement level 1 HAVI commands. An example of this device could be one that contains an over-ride DCM but does not support the CCEP communications infrastructure.

In the case of adding an IAV device, it should be appreciated that in the previous examples, the application queried the registry to get a message handle for the device it wished to communicate with. Note that for a FAV device, the handle returned is always used to access the DCM. It is not possible to send messages directly to the device. To understand how a device which is added to the network becomes available via the registry then the following example is used.

For example, assume a new device (e.g., a camcorder) is plugged into the HAVI network (e.g., 1394 based). This causes a bus reset. The bus reset is handled by the Communications media manager (CMM) on the IRD. The CMM is responsible for querying the SDD data of the Camcorder device to discover its capabilities. Assuming the device is a level 1 device, i.e. it does not have an uploadable DCM, then the CMM informs that Device Manager, that a new device has been installed. The Device Manager creates a new DCM for this type of device and registers the DCM with the registry. The DCM, when it initializes is free to query the device directly to find out more information about itself and to specialize itself if needed, e.g. it can access UI information if it exists in the device. Once the DCM is registered in the registry, then any other module can query the registry to get a handle for the device and communicate with the DCM to access and control the device and present the UI to the user.

For example, Figure 12A and 12 B show an exemplary UI display (e.g., on a television screen) for such a device(e.g., the camcorder). Figure 12A shows a text menu display, where the user is presented with the various controls that can be modified using the control names and control values. For buttons, the user can select them (which equates to pushing a button). Figure 12B shows a "next level" UI display for the camcorder. Here, the user selected the main panel from the menu in Figure 12A, and the display presents controls based on their grouping information. In the present embodiment, group names are used on a tabbed interface to allow the user to navigate between groups within the selected panel.

Referring now to Figure 13, a flow chart of a process 1300 in accordance with one embodiment of the present invention is shown. Process 1300 shows the steps of a method for providing seamless interoperability and integration of a plurality of devices in a HAVI network by using the SDD information stored in each device. Process 1300 begins in step 1301, where a new device is coupled to a HAVI network. In step 1302, the device is queried to obtain a description (e.g., SDD) of level 1 functions supported by the device. In step, 1303, a level 1 DCM, which implements the level 1 functions, is generated for the device based upon the SDD. In step 1304, the device manager determines whether the new device contains software for a level 2 DCM.

Referring still to Figure 13, in step 1305, if the new device contains software for implementing level 2 functions, the software is retrieved from the device and in step 1306, a level 2 DCM which implements the level 2 functions is generated using the software. In steps 1307 and 1308, the device is continually accessed via the level 2 DCM. In steps 1309 and 1310, if the new device does not include software for a level 2 DCM, the new device is continually accessed via the level 1 DCM. In this manner, the combination of the level 1 DCM and the level 2 DCM allow the present invention to provide seamless interoperability and integration of the new device with the plurality of devices in the network.

Figure 14 shows a flow chart of a process 1400 in accordance with one embodiment of the present invention. Process 1400 shows the steps of a method for providing a basic command functionality and an expanded command functionality between a plurality of devices in a HAVI network.

In step 1401, a device is coupled to a HAVI network which includes a FAV device. In step 1402, a generic level 1 DCM for the device is generated by the FAV device. As described above, the generic level 1 DCM is a basic abstraction of the capabilities of the device. The generic level 1 DCM enables the device to respond to a basic set of commands from the FAV device. In steps 1403 and 1404, the FAV device uses the generic DCM to query the device to determine whether the device includes descriptive information (e.g., SDD). As described above, the descriptive information describes the capabilities of the device. In step 1405, if the device includes descriptive information, the FAV device generates a parameterized DCM for the device by modifying the generic DCM based upon the descriptive information. In steps 1406 and 1407, the device is continually controlled using the parameterized level 1 DCM. In steps 1408 and 1409, if the device does not include descriptive information, the FAV device is continually controlled via the generic level 1 DCM.

Referring now to Figure 15, a flow chart of a process 1500 in accordance with one embodiment of the present invention is shown. Process 1500 shows the steps of a method for ensuring future upgradability and expandability of devices in HAVI network. In step 1501, a default level 1DCM for a device coupled to the network is generated. As described above, the default level 1 DCM is configured to ensure at least a minimum degree of interoperability between the device and the other devices on the HAVI network. In step 1502, the device is accessed by other devices via the default level 1 DCM. As described above, the default DCM enables the first device to respond to a default set of commands from other devices on the HAVI network In step 1503, an updated level 1 DCM for the devices is either

received or not received. In step 1504, updated level 2 DCM for the device is either received or not received. As described above, the updates enable the device's capabilities and functionality to evolve (e.g., as new, more efficient software becomes available).

In steps 1509 and 1508, where an updated level 1 DCM is received, the updated level 1 DCM is incorporated (e.g., this could involve merely modifying the current level 1 DCM) and the device is continually accessed via this DCM until a later update is available. In step 1505, where an updated level 2 DCM is received, the DCM manager on the host FAV device unlinks the current DCM, and in steps 1506 and 1507, the updated level 2 DCM is linked and the registry is updated to allow other devices within the HAVI network to access the updated level 2 DCM. This DCM is continually used for accessing the device until a later updated level 2 DCM is received. In step 1510, if neither an updated level 1 or an updated level 2 DCM is received, process 1500 continues operation with the current DCM (e.g., the last installed DCM).

Figure 16 shows a flow chart of a process 1600 in accordance with one embodiment of the present invention. Process 1600 shows the steps of a method for providing seamless interoperability and integration of legacy devices with the HAVI compliant devices in a HAVI network. Process 1600 begins in step 1601, where a legacy device is coupled to the HAVI network. In step 1602, the legacy device is queried via the proprietary protocol to determine a set of basic capabilities of the legacy device. As described above, HAVI compliant devices use a common HAVI defined protocol. The legacy device typically communicates with external devices (if at all) using

a proprietary protocol. In step 1603, process 1600 maps a set of basic commands from the common protocol to the set of basic capabilities of the legacy device. In step 1604, a level 1 DCM for the legacy device is generated. As described above, the DCM is based upon the set of basic commands. In steps 1605 and 1606, the legacy device is continually accessed via the level 1 DCM such that the other HAVI devices are able to access the set of basic capabilities of the legacy device.

Figure 17A shows a flow chart of a process 1700 in accordance with one embodiment of the present invention. Process 1700 shows the steps of a method of controlling devices within a home audio/video network using an application program from an external service provider. In step 1702, an application program is originated by a service provider (e.g., via cable television, internet web site, etc.). In step 1703, the service provider communicates the application program from the service provider to an intelligent receiver/decoder device of the HAVI network over a logical channel. The application is subsequently instantiated within a computer readable memory unit of the intelligent receiver/decoder.

Referring still to Figure 17A, in step 1704, the application program queries the HAVI registry of the device (e.g., FAV device) to locate DCMs on the network and selects a respective DCM from the registry. In step 1705, the down loaded application determines a communications point information from the selected DCM. In step 1706, the application controls a respective device of the HAVI network by communicating with the respective device using the communication point information. In step 1707,

if the application needs to control another device, steps 1704 through 1706 are repeated. If the application does not need to control another device, processes 1700 ends in step 1708.

Figure 17B shows a diagram of a HAVI network 1750 with the service provider 1720 in accordance with process 1700 of Figure 17A. As described above, the application program is downloaded from the service provider 1720 to the HAVI network 1750. The application is instantiated on the processor 601 and memory 602 of the intelligent device (e.g., set top box 301). HAVI network 1750 also includes four HAVI devices, device 0 through device 3 (e.g., television, DVTR, etc.).

DCM MANAGEMENT API

An example DCM management API in accordance with one embodiment of the present invention is shown below. In the present embodiment, the common DCM commands include areas such as connection management, information and status queries for the device and its plugs etc. Regardless of the type of device represented by the DCM, such message sets need to be supported.

The following is a list of DCM management messages that, in the present embodiment, all DCM's need to support for the HAVI architecture:

ChannelUsage(plug); // returns the 1394 isoch. channel used by the specified unit plug

PlugUsage(channel); // returns the plug associated with the specified channel

GetDevicePlugCount(count); // returns the number of unit plugs on the device

EstablishInternalConnection(sourcePlug, destPlug);

EstablishExternalConnection(sourcePlug, destPlug)

StartDataFlow(plug);

StopDataFlow(plug);

GetSourceConnection(in dest, out source); // given a destination plug, return the source to which it is connected (return the source plug of the transmitting device which shares the same isoch. channel)

GetDestinationConnection(in source, out);

GetAllConnection();

NotifyOnConnectionChange();

GetDynamicConnectionCapability(); // report whether the target device supports dynamic connection changes or not (e.g., a non-1394 device)

LockConnection(plug);

UnlockConnection(plug);

GetConnectionStatus(plug); // status = busy, data transmission format, channel, bandwidth usage, etc.

BreakIntemalConnection(plug);

BreakExternalConnection(plug);

GetInputSignalFormat(plug);

setInputSignalForrnat(plug);

NotifyInputSignalFormat(plug); // send a notification if the signal format is changed.

GetSupportedInputSignalFormats(plug); // repeat the above for output signals

GetFunctionInfo(); // return information about the functional modules within the device (e.g., the AV/C subunits)

GetDeviceType();

GetVendorName();

GetVendorLogo();

SetDevicePowerState(powerstate);

GetDevicePowerState(powerstate);

GetSupportedPowerStates(list);

NotiyPowerState(powerstate);

ReserveDevice();

GetDeviceReservationStatus();

NotifyDeviceReservationStatus();

VendorDependentCommand(command parameters); // pass thru a vendor-specific command in the native protocol;

Function Control Module (FCM) Messages;

The function-specific messages correspond to the typical native commands such as PLAY, STOP, REWIND for the VCR functionality within a device. Because we need to address these messages to a well defined location within a device, we use the FCM (Function Control Module) to represent the target of these messages. Like DCM's, there are some messages that have to deal with administration and management of FCM's. These messages are supported by all FCM's, independent of their particular domain. The messages are as follows:

GetFunctionType(); II VCR, tuner, disc, etc.

GetFunctionInfo(); // more detailed information about the function, such as the particular kind of disc player (DVD, CD, etc.)

GetNumberOfPlugs(inputPlugs outputPlugs); // returns the number of source and destination plugs for the functional module

GetFunctionStatus(); // current status of the functional module, including the status of source and destination plugs (input and output)

GetPowerState(powerState); // functional modules may have individually controllable power states

SetPowerState(powerState);

GetSupportedPowerStates(list);

GetSupportedDataFormats(list); // returns the data formats supported by this functional module

NativeCommand(params); // send the functional module a command in its native command protocol

The functional domain messages are based on the type of function (VCR, tuner, etc.). These are the typical PLAY, STOP, REWIND commands that one would expect.

Level I interoperability includes both device-to-device and human-to-device interaction. The functional message sets such as PLAY, STOP and REWIND are used for device-to-device interaction. One example of this would be a video editing software package that wants to control any type of VCR; the program is designed with a very specific set of user interface controls which apply to all VCR's. When the user interacts with the application, the application in turn sends domain-specific commands such as PLAY and STOP to the target device.

In the HAVI architecture, the application will send these messages to the DCM, and the DCM will translate them into the native language of the target BAV device. If the target device happens to support the HAVI

messaging architecture, then these commands don't need to be translated at all; they are simply sent as HAVI message to the HAVI target.

Camcorder devices are essentially VCR like. Their additional functionality is part of the camcorder effects, transitions, etc. They are as follows:

stop()
play()
rewind()
forward()
record()
volume(setvalue)
changeStatus(newMode) // newMode of: VTR, CAMERA, STANDBY
cameraControl(controlType) // controlTYPE defines control Type and subType structures eg zoom, zoomValue, or Effect, transition5 etc.

MiniDiscs are of the category random access storage, they support a base set of commands to control PLAY, FORWARD, etc and a set of command specific to random access media. The commands are as follows:

stop()
play()
rewind()
forward()
record()
volume(setValue)
changeStatus(newMode) // newMode of: STANDBY
seek(track)
seekstart()
seekEnd()
getDiskInfo()
mdControl(controlType) // controlTYPE defines control Type and subType structures eg intro mode, random play.

Hard Disks are of the category random access storage, they support a base set of commands to control PLAY, FORWARD, etc and a set of command specific to random access media. The commands are as follows:

```
stop()
play()
rewind()
forward()
record(type) // type structure passes info to allow intelligent devices to
optimise storage policy changestatus(newMode) // newMode of: STANDBY
seek(track)
seek(block)
seekStart()
seekEnd()
HDDControl(controlType) // controlTYPE defines control Type and subType
structures eg layout commands for block-structures
```

With respect to user interfaces, it should be appreciated that a generic and simple UI may be a textual based one, as shown in Figure 12A. A more sophisticated one, based on DCM specialization, may be as shown on figure 12B. Where graphical information, carried in SDD is used by the generic DCM to specialize itself.

Hence, the present invention provides a home audio visual (AV) network which defines an open architecture for inter-operating CE (consumer electronic) devices in a home network. The interoperability aspects of the present invention define an architectural model that allows CE devices from any manufacturer to inter-operate and function seamlessly within the user's home AV system. The system of the present invention includes a combination of a base set of generic device controls with an method to extend a base control protocol as new features and new CE devices are deployed within the home AV network. In so doing, the

architecture of the present invention is extensible, and can be readily modified and advanced as market requirements and technology change.

The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents.

CLAIMS

What is claimed is:

1. A method for providing interoperability and communication between a plurality of devices in a network using a common protocol, the method comprising the steps of:

a) coupling a legacy device to the network as one of the plurality of devices wherein the legacy device communicates with the network using a proprietary protocol;

b) querying the legacy device using the proprietary protocol to determine a set of basic capabilities of the legacy device;

c) mapping a set of basic commands from the common protocol to the set of basic capabilities of the legacy device;

d) generating a control module for the legacy device, wherein the control module is based upon the set of basic commands; and

e) accessing the set of basic capabilities of the legacy device to provide interoperability and communication between the legacy device and the plurality of devices by accessing the legacy device via the control module.

2. The method of Claim 1 wherein steps b) through d) are performed by a device manager executing on an

intelligent device of the plurality of devices in the network.

3. The method of Claim 1 wherein the control module provides a standardized control interface for the legacy device.

4. The method of Claim 3 wherein the standardized control interface includes software code which provides a predefined set of interoperability interfaces for the legacy device which enable communication between the legacy device and the plurality of devices in the network.

5. A method for a home audio visual network including a plurality of devices coupled to a bus, wherein one device is a host device having a processor coupled to a computer readable memory, the memory containing computer readable instructions which when executed implement a method for providing interoperability and communication between the devices, the method comprising the steps of:

a) querying a legacy device, of the plurality of devices, via a proprietary protocol of the legacy device to determine a set of basic capabilities supported by the legacy device;

b) mapping a set of basic commands from a common protocol to the set of basic capabilities of the legacy device;

c) generating a control module for the legacy device, wherein the control module is based upon the set of basic commands; and

d) providing interoperability and communication between the legacy device with the plurality of devices by the plurality of devices accessing the set of basic capabilities of the legacy device using the control module.

6. The method of Claim 5 wherein steps a) through c) of the method are performed by a device manager executing on the host device.

7. The method of Claim 1 or 5 wherein the control module executes on one of the plurality of devices in the network.

8. The method of Claim 1 or 5 wherein the legacy device is an analog device.

9. The method of claim 5 wherein steps a) through c) are performed by a device manager executing on the host device.

10. The method of Claim 1, 6 or 9 wherein the legacy device is accessed by the plurality of devices via the control module, wherein the plurality of devices communicate

with the control module using the common protocol and the legacy device communicates with the control module using the proprietary protocol.

11. The method of Claim 1, 5 or 9 wherein step b) includes the step of communicating with the legacy device using the proprietary protocol to determine the set of basic capabilities.

12. The home audio visual network of Claim 1, 5 or 9 wherein the bus of the network is an IEEE 1394 bus and the control module is configured to function with or to IEEE 1394.

13. The method of Claim 9 wherein the control module provides a standardized control interface for the legacy device and wherein the control interface includes software which provides a predefined set of interoperability interfaces for the legacy device which enable communication between the legacy device and the plurality of devices in the network.

14. The method of Claim 5 or 9 wherein the control module provides a standardized control interface for the legacy device and wherein the control interface includes software which provides a predefined set of functionality interfaces for the legacy device which enable communication

between the legacy device and the plurality of devices in the network.

15. A method for an apparatus method for providing interoperability and communication between a plurality of devices in a network using a common protocol, the method comprising the steps of:

a) means for coupling a legacy device to the network as one of the plurality of devices wherein the legacy device communicates with the network using a proprietary protocol;

b) means for querying the legacy device using the proprietary protocol to determine a set of basic capabilities of the legacy device;

c) means for mapping a set of basic commands from the common protocol to the set of basic capabilities of the legacy device;

d) means for generating a control module for the legacy device, wherein the control module is based upon the set of basic commands; and

e) means for accessing the set of basic capabilities of the legacy device to provide interoperability and communication between the legacy device and the plurality of devices by accessing the legacy device via the control module.

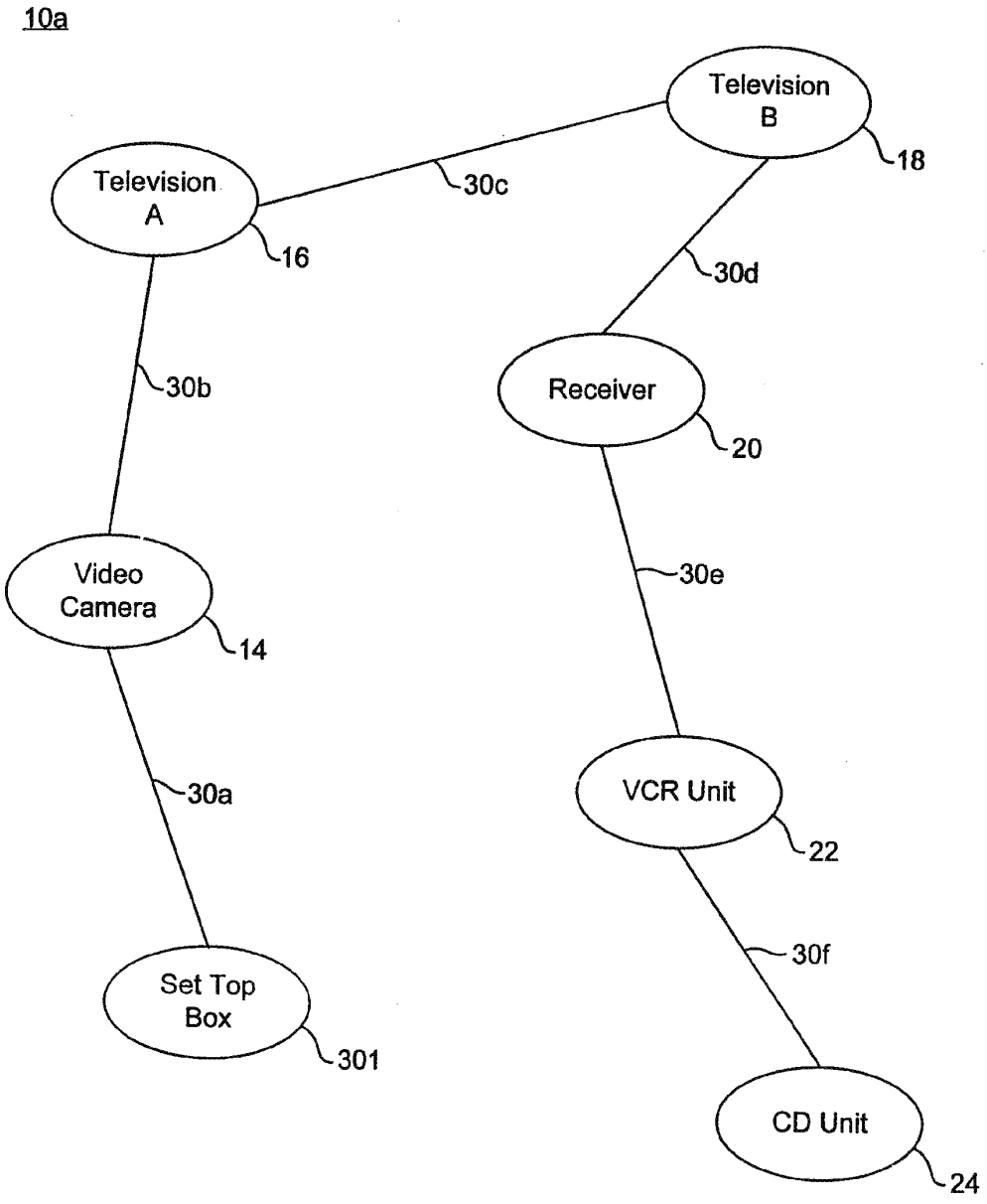

10a
Television B
18
Television A
16
30c
30d
30b
Receiver
20
Video Camera
14
30e
30a
VCR Unit
22
30f
Set Top Box
301
CD Unit
24

FIG. 1A

10b

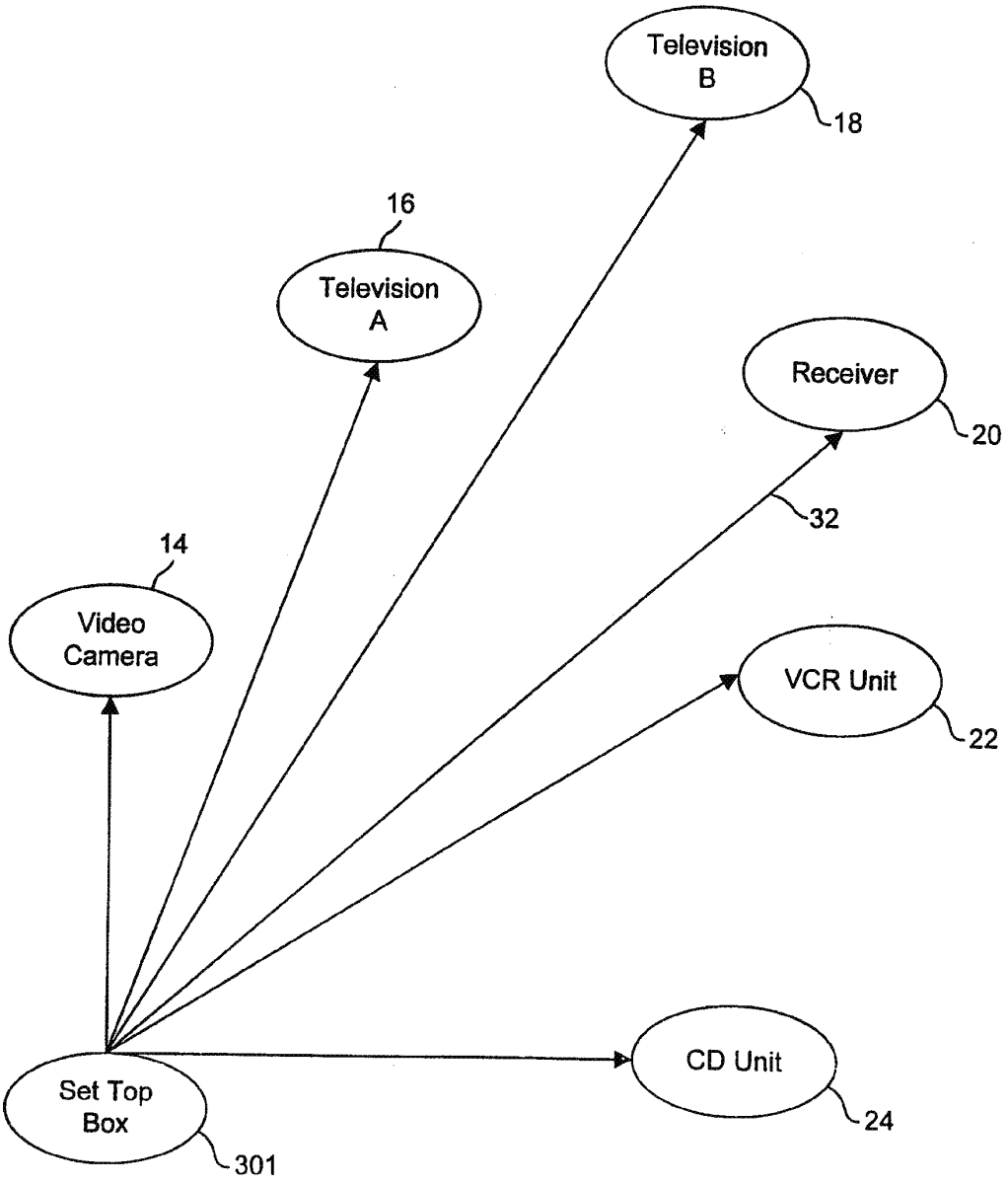

Television
B
18
16
Television
A
Receiver
20
32
14
Video
Camera
VCR Unit
22
CD Unit
24
Set Top
Box
301

FIG. 1B

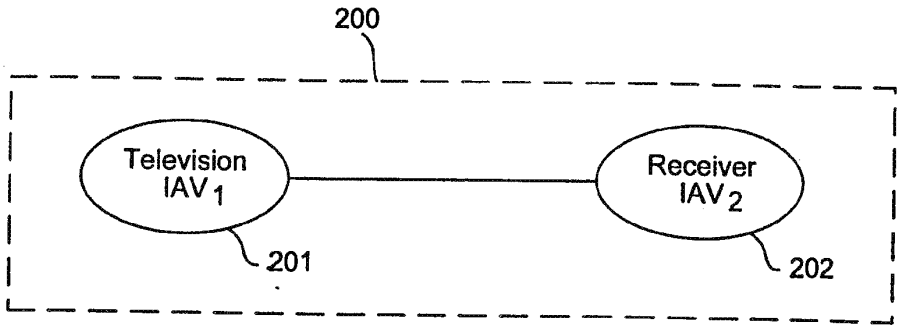

200
Television
IAV 1
201
Receiver
IAV 2
202

FIG. 2

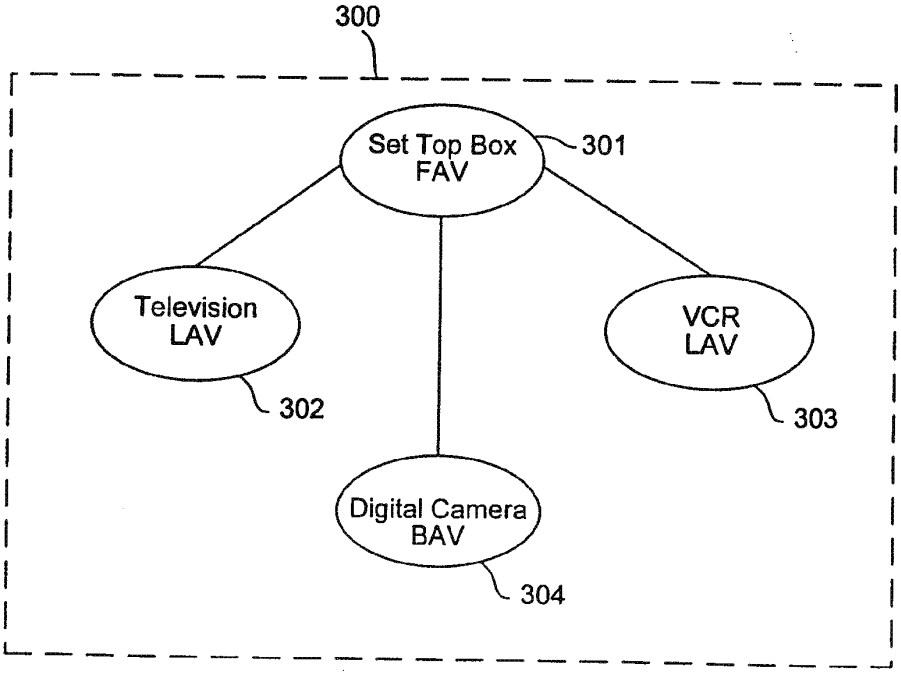

300
Set Top Box
FAV
301
Television
LAV
302
VCR
LAV
303
Digital Camera
BAV
304

FIG. 3

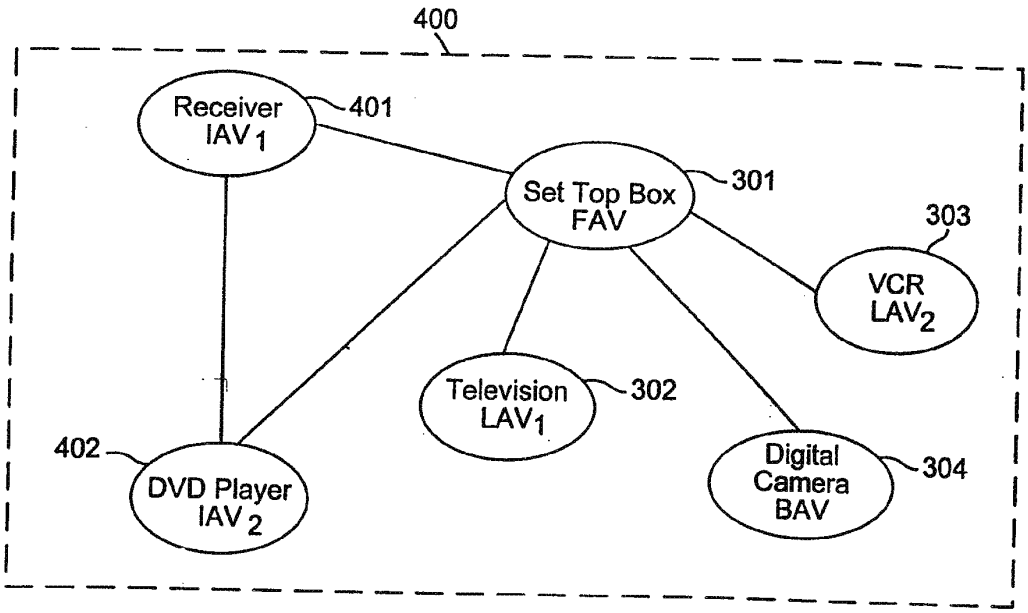

400
Receiver
IAV1
401
Set Top Box
FAV
301
303
VCR
LAV2
Television
LAV1
302
402
DVD Player
IAV2
Digital
Camera
BAV
304

FIG. 4

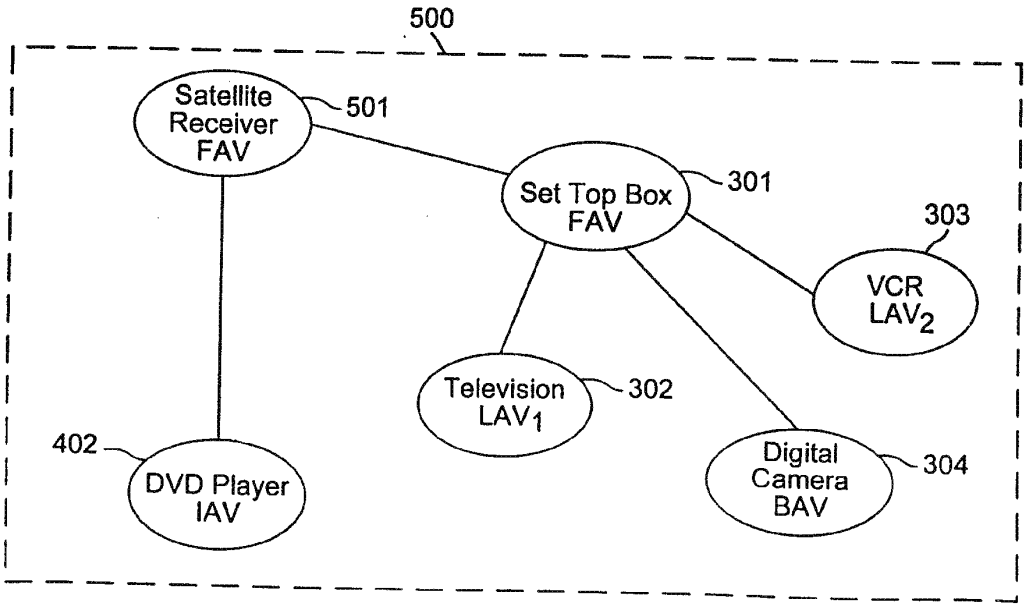

500
Satellite
Receiver
FAV
501
Set Top Box
FAV
301
303
VCR
LAV2
Television
LAV1
302
402
DVD Player
IAV
Digital
Camera
BAV
304

FIG. 5

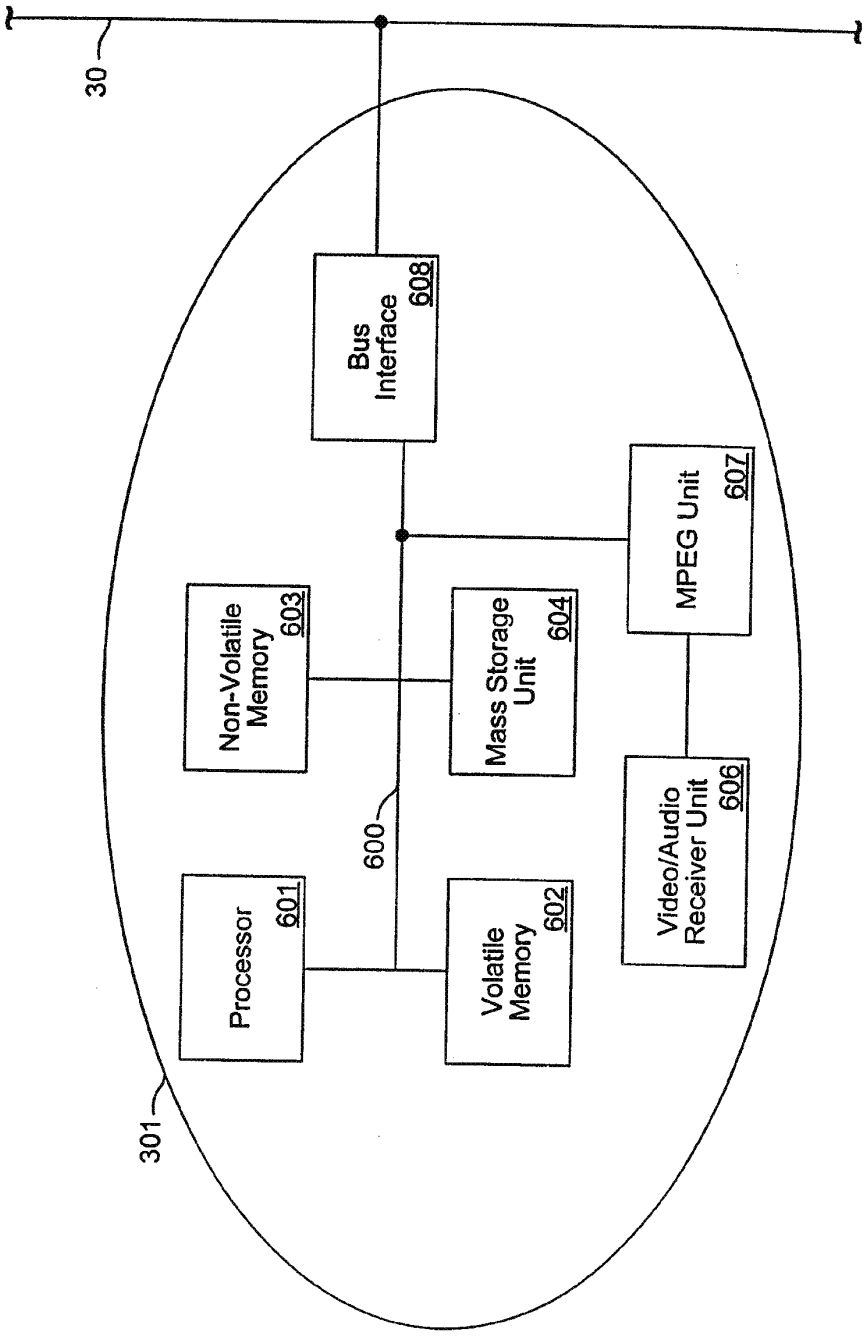

30
Bus Interface 608
MPEG Unit 607
Non-Volatile Memory 603
Mass Storage Unit 604
Video/Audio Receiver Unit 606
600
Processor 601
Volatile Memory 602
301

FIG. 6

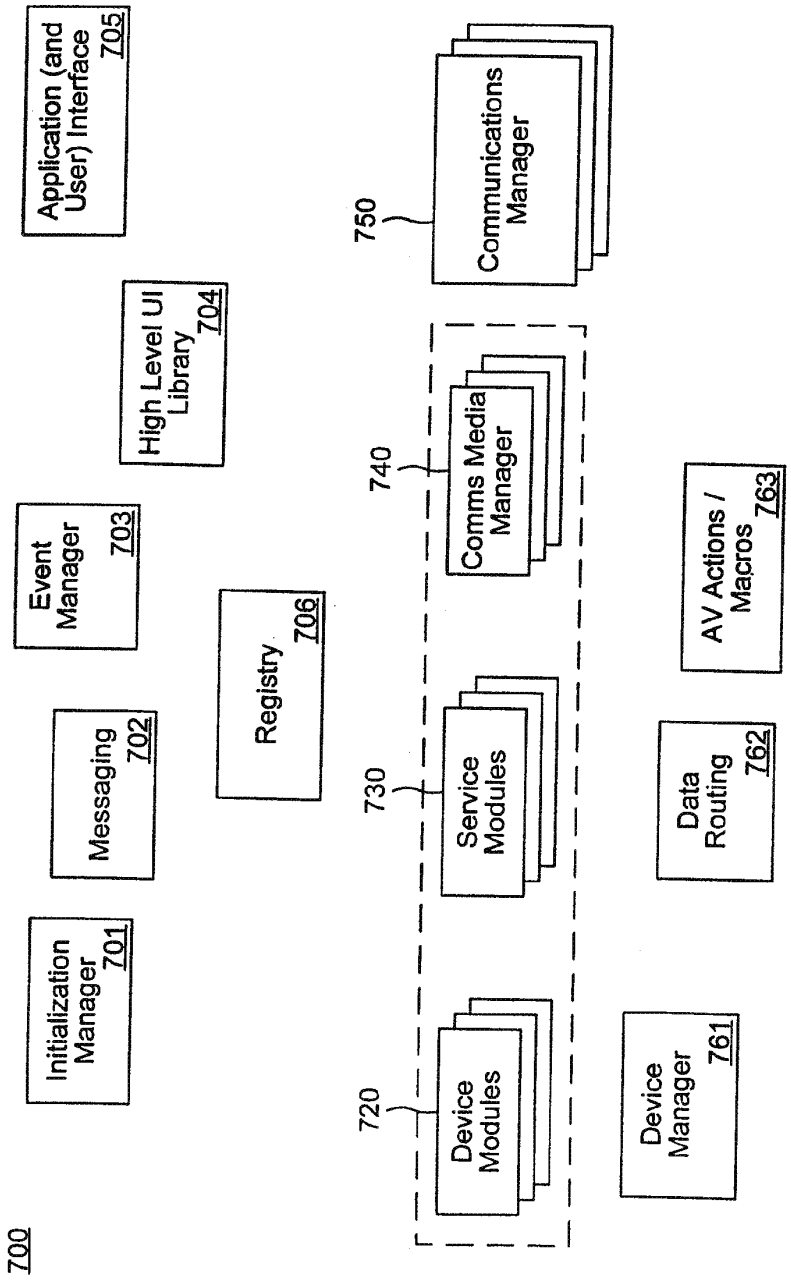

700
Application (and User) Interface 705
High Level UI Library 704
Event Manager 703
Messaging 702
Registry 706
Initialization Manager 701
720
Device Modules
730
Service Modules
740
Comms Media Manager
750
Communications Manager
Device Manager 761
Data Routing 762
AV Actions / Macros 763

FIG. 7

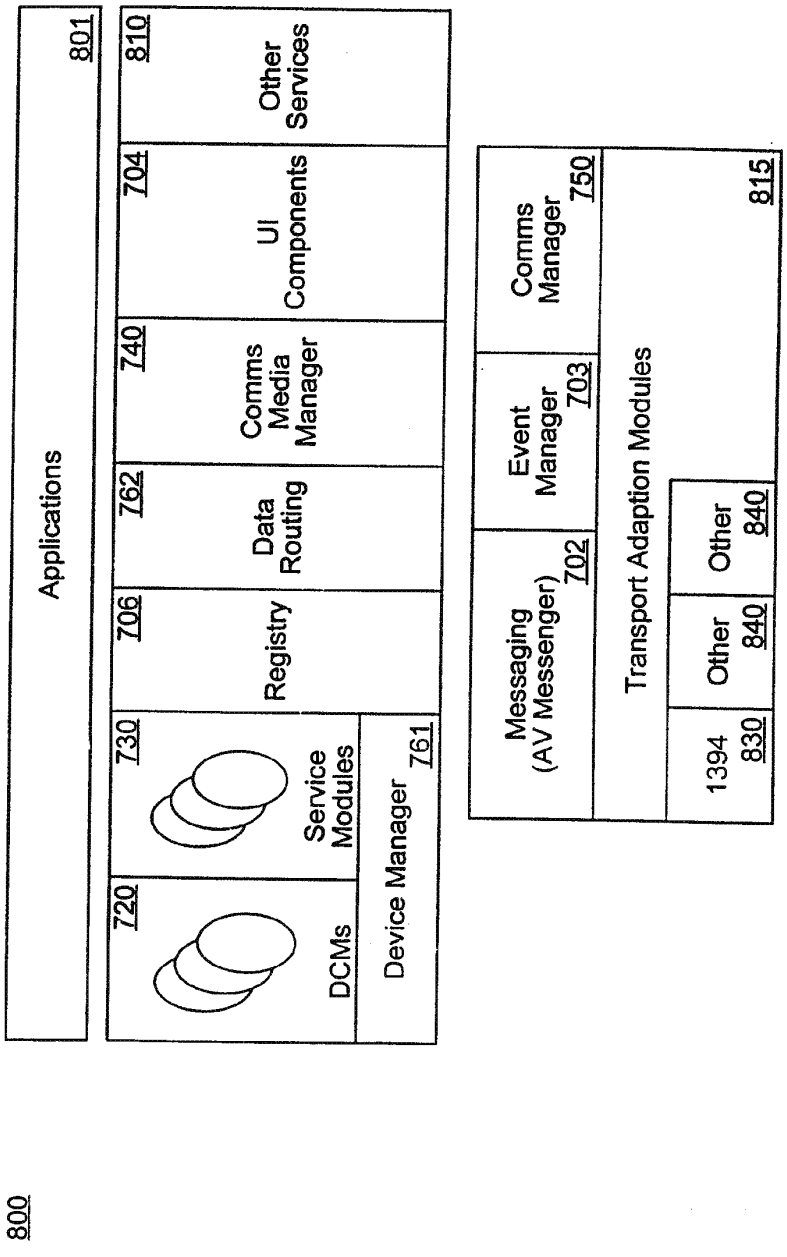

800
Applications
801
DCMs
720
Service Modules
730
Device Manager
761
Registry
706
Data Routing
762
Comms Media Manager
740
UI Components
704
Other Services
810
Messaging (AV Messenger)
702
Event Manager
703
Comms Manager
750
Transport Adaption Modules
1394
830
Other
840
Other
840
815

FIG. 8

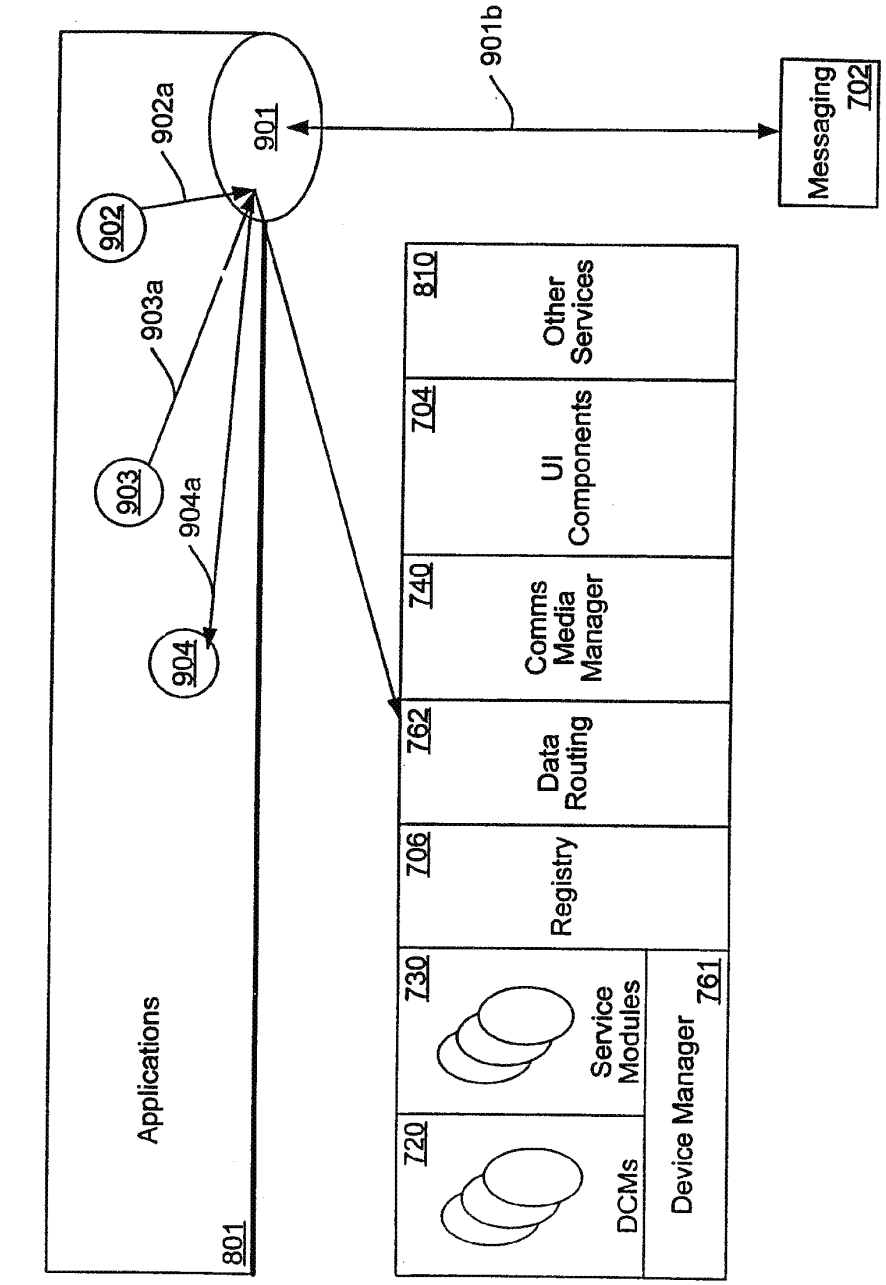

900
801
Applications
902a
902
903a
903
904a
904
901
901b
Messaging
702
810
Other Services
704
UI Components
740
Comms Media Manager
762
Data Routing
706
Registry
730
Service Modules
720
DCMs
Device Manager
761

FIG. 9

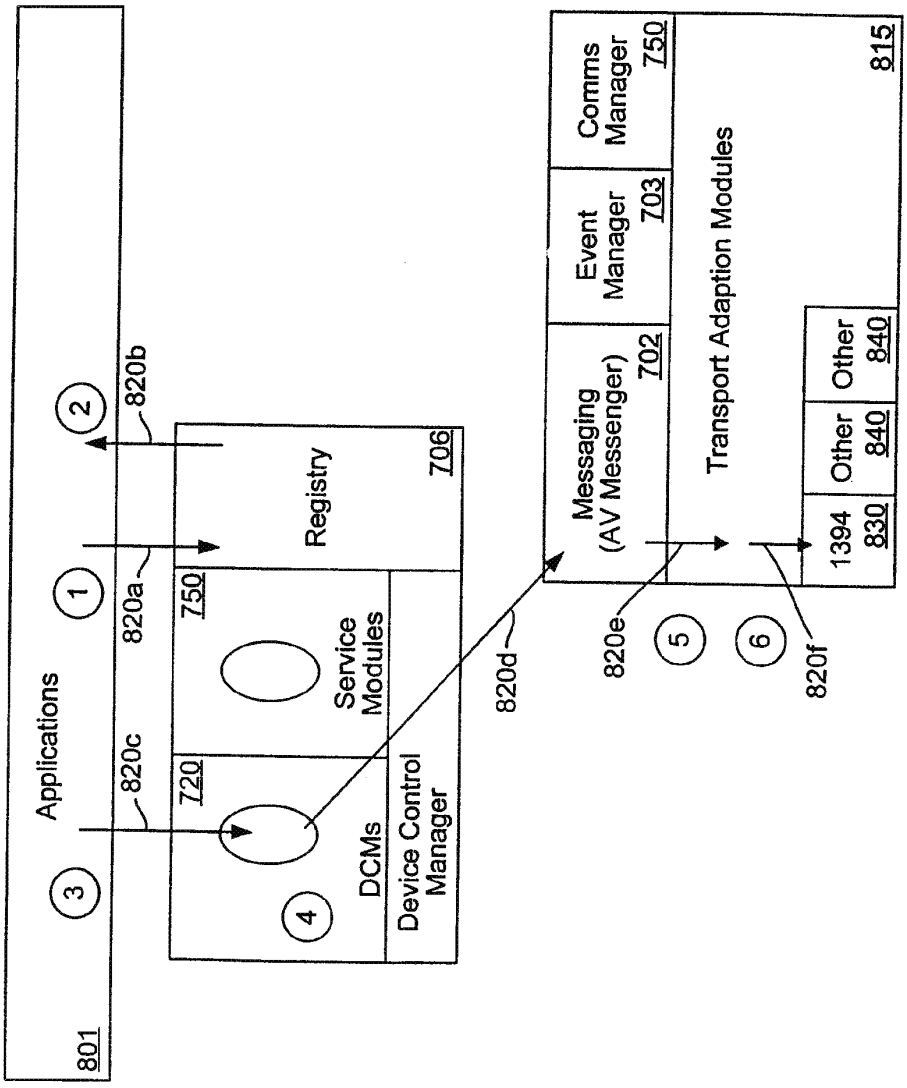

Applications
801
820a
820b
820c
820d
820e
820f
1
2
3
4
5
6
Registry
706
750
Service Modules
720
DCMs
Device Control Manager
Messaging (AV Messenger)
702
Event Manager
703
Comms Manager
750
Transport Adaption Modules
815
1394
830
Other
840
Other
840

FIG. 10

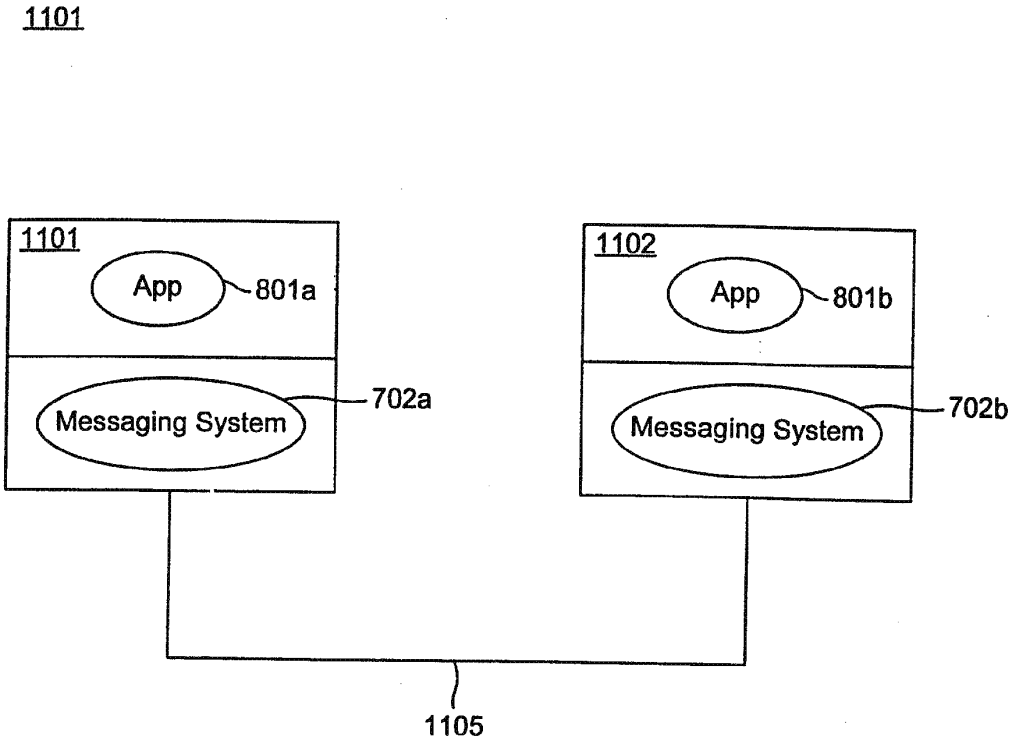

1101
1101
App
801a
Messaging System
702a
1102
App
801b
Messaging System
702b
1105

FIG. 11

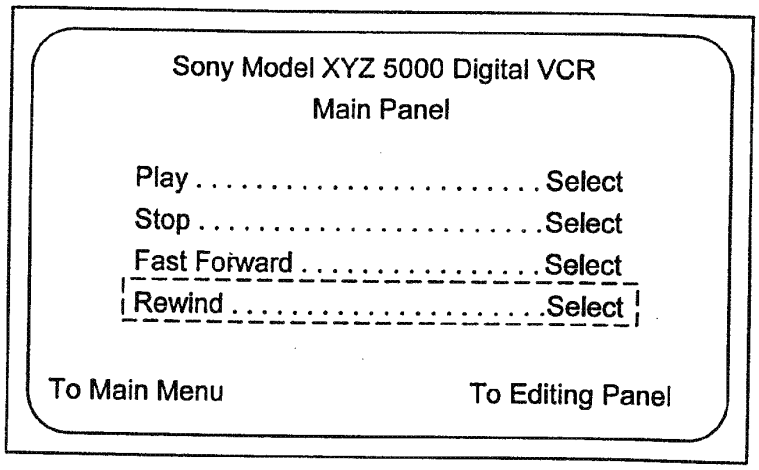


FIG. 12A

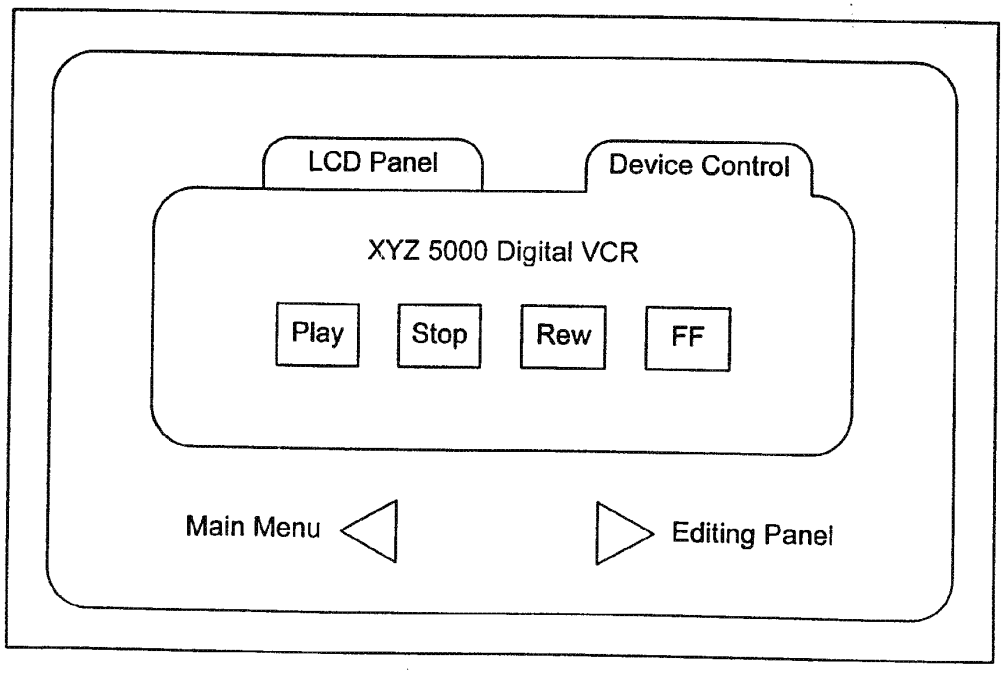


FIG. 12B

1300

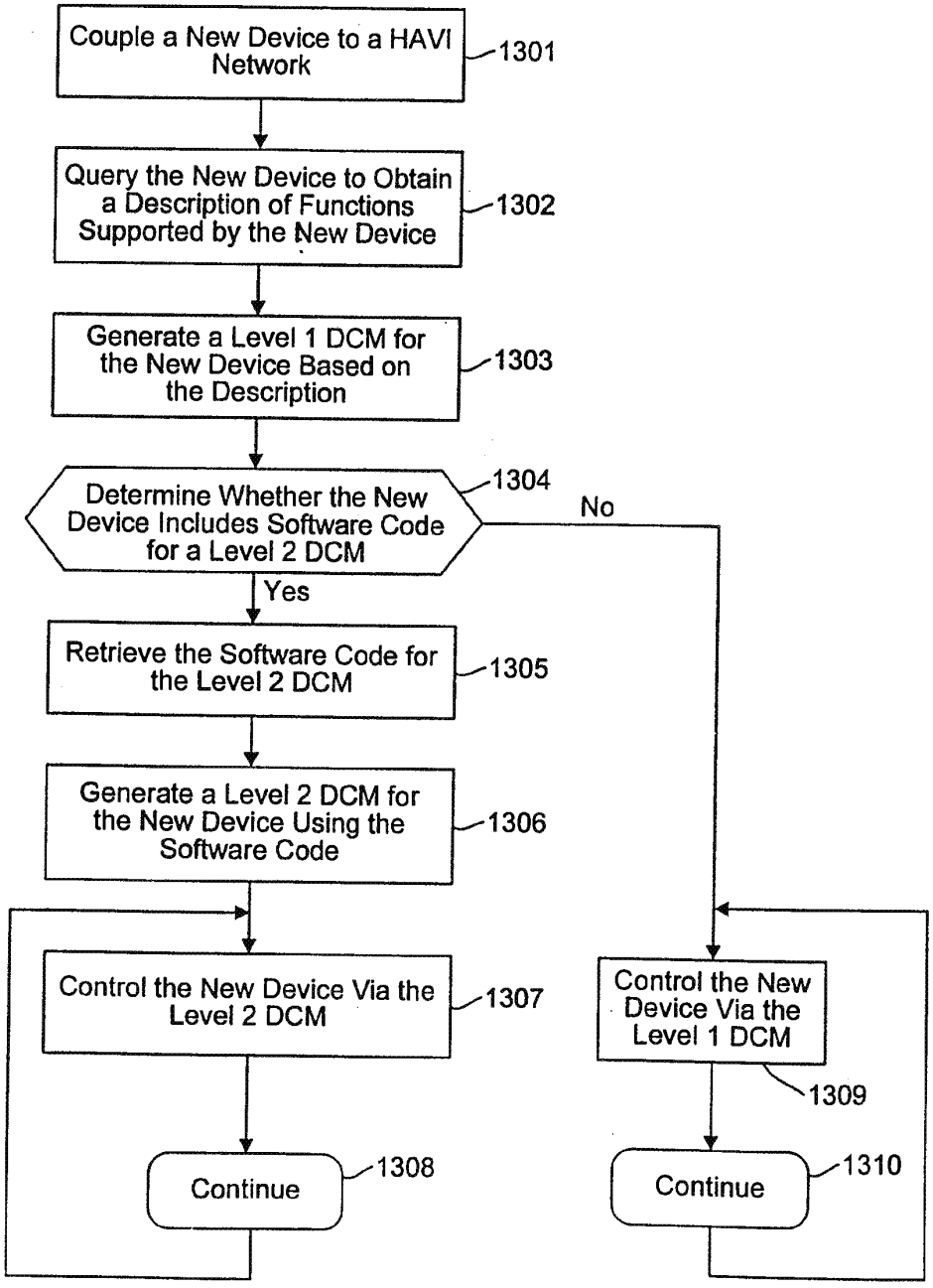

Couple a New Device to a HAVI Network
1301
Query the New Device to Obtain a Description of Functions Supported by the New Device
1302
Generate a Level 1 DCM for the New Device Based on the Description
1303
Determine Whether the New Device Includes Software Code for a Level 2 DCM
1304
No
Yes
Retrieve the Software Code for the Level 2 DCM
1305
Generate a Level 2 DCM for the New Device Using the Software Code
1306
Control the New Device Via the Level 2 DCM
1307
Continue
1308
Control the New Device Via the Level 1 DCM
1309
Continue
1310

FIG. 13

1400

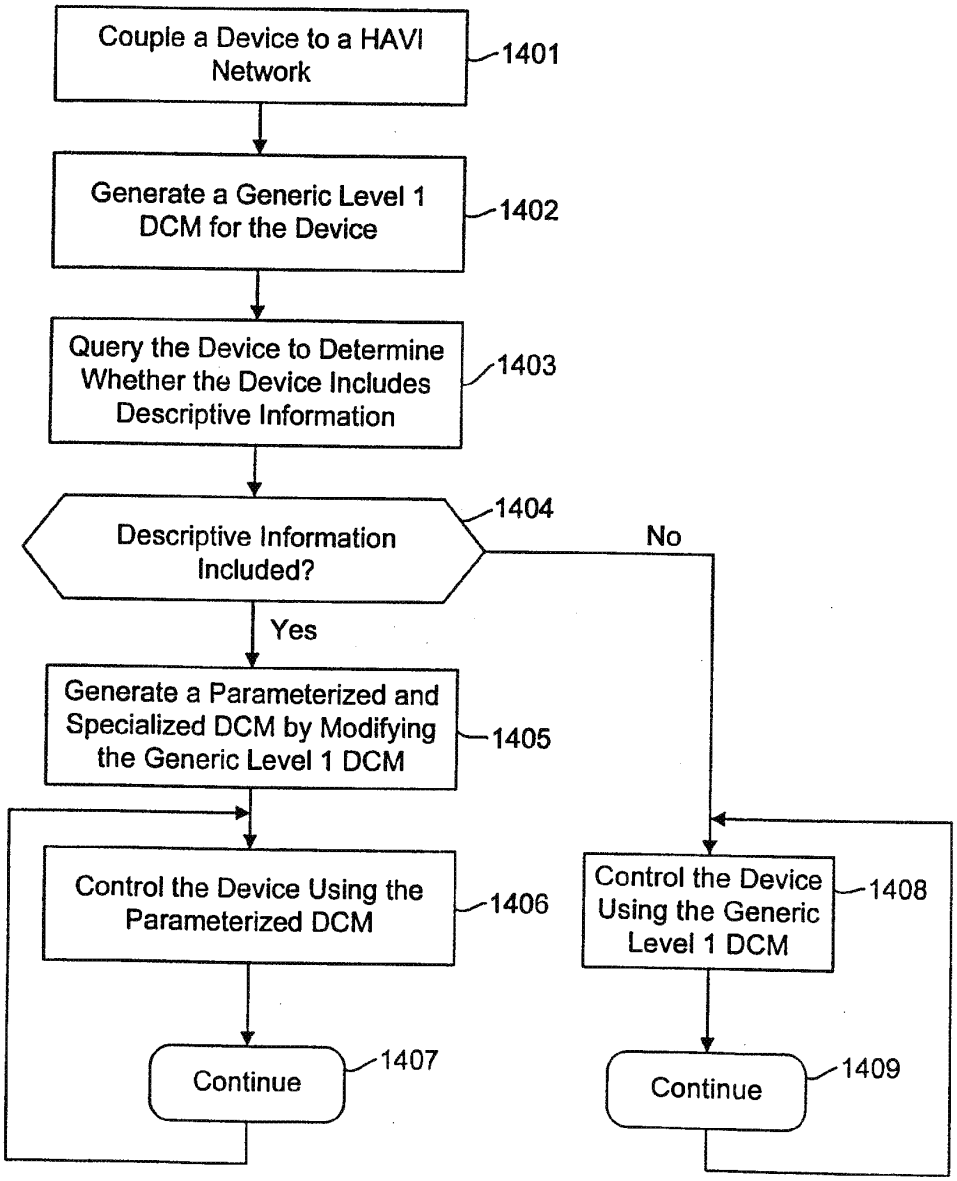

Couple a Device to a HAVI Network
1401
Generate a Generic Level 1 DCM for the Device
1402
Query the Device to Determine Whether the Device Includes Descriptive Information
1403
Descriptive Information Included?
1404
No
Yes
Generate a Parameterized and Specialized DCM by Modifying the Generic Level 1 DCM
1405
Control the Device Using the Parameterized DCM
1406
Continue
1407
Control the Device Using the Generic Level 1 DCM
1408
Continue
1409

FIG. 14

1500

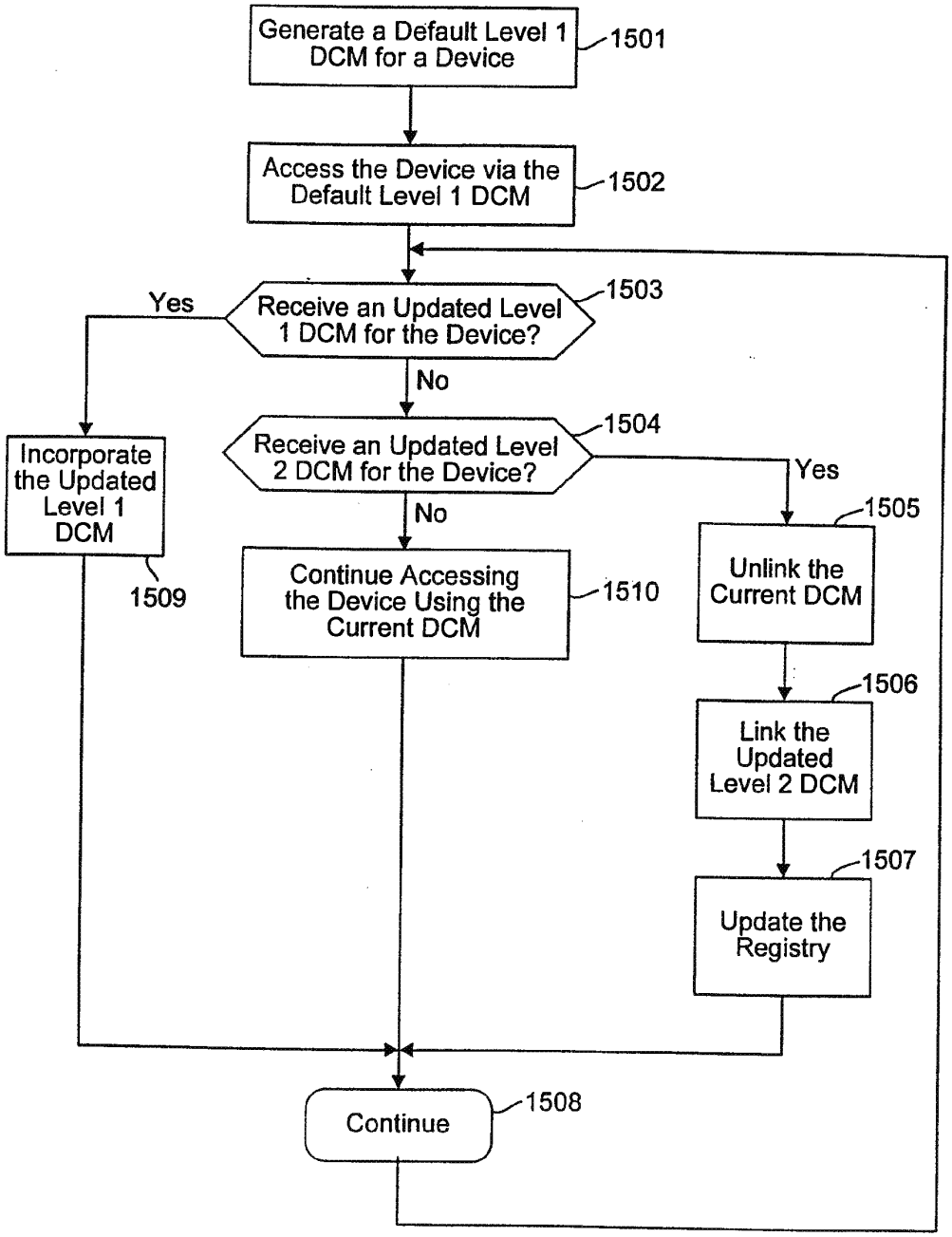

Generate a Default Level 1 DCM for a Device
1501
Access the Device via the Default Level 1 DCM
1502
Receive an Updated Level 1 DCM for the Device?
1503
Yes
No
Incorporate the Updated Level 1 DCM
1509
Receive an Updated Level 2 DCM for the Device?
1504
Yes
No
Continue Accessing the Device Using the Current DCM
1510
Unlink the Current DCM
1505
Link the Updated Level 2 DCM
1506
Update the Registry
1507
Continue
1508

FIG. 15

1600

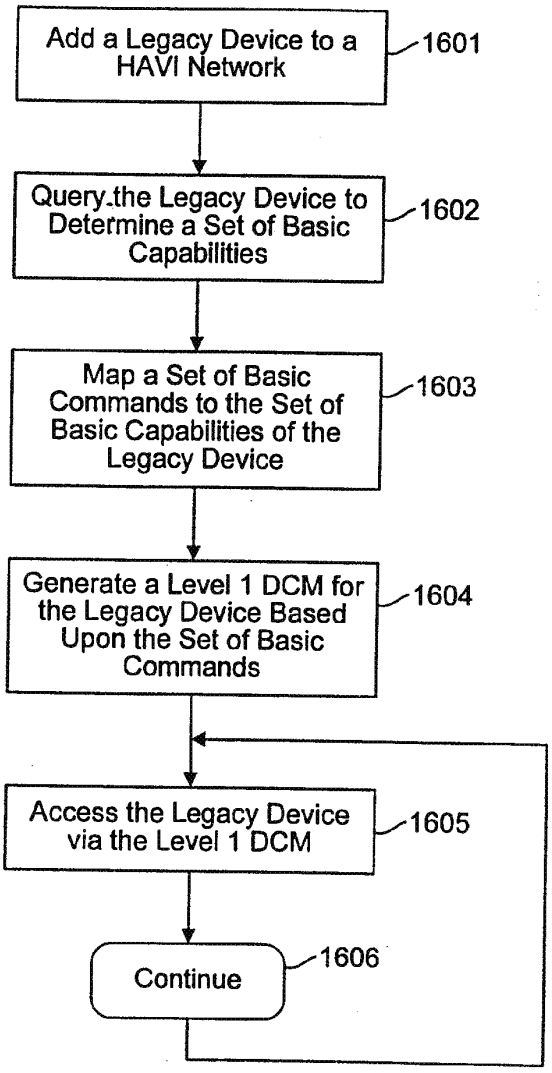

Add a Legacy Device to a HAVI Network
1601
Query the Legacy Device to Determine a Set of Basic Capabilities
1602
Map a Set of Basic Commands to the Set of Basic Capabilities of the Legacy Device
1603
Generate a Level 1 DCM for the Legacy Device Based Upon the Set of Basic Commands
1604
Access the Legacy Device via the Level 1 DCM
1605
Continue
1606

FIG. 16

1700

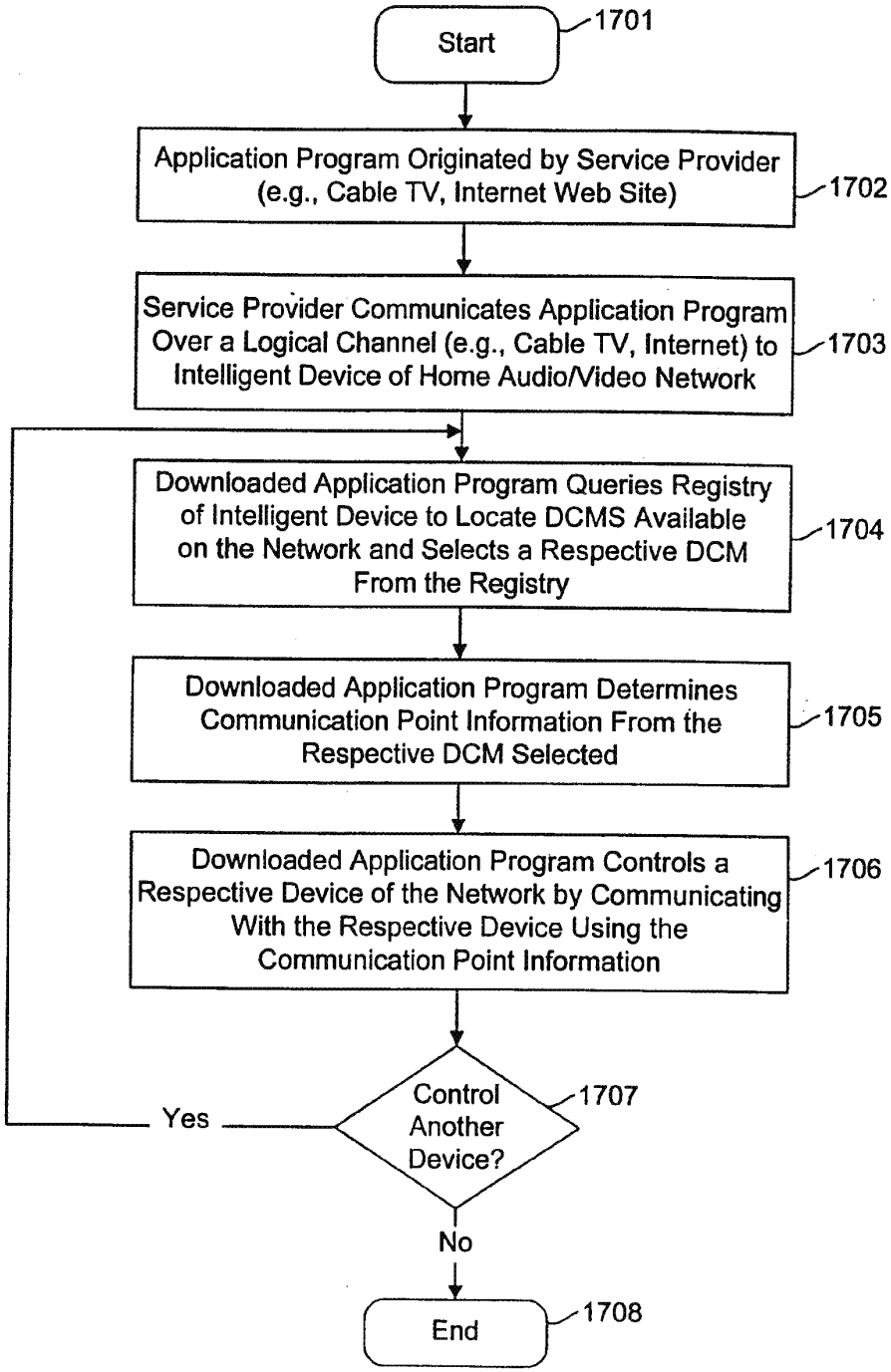

Start
1701
Application Program Originated by Service Provider (e.g., Cable TV, Internet Web Site)
1702
Service Provider Communicates Application Program Over a Logical Channel (e.g., Cable TV, Internet) to Intelligent Device of Home Audio/Video Network
1703
Downloaded Application Program Queries Registry of Intelligent Device to Locate DCMS Available on the Network and Selects a Respective DCM From the Registry
1704
Downloaded Application Program Determines Communication Point Information From the Respective DCM Selected
1705
Downloaded Application Program Controls a Respective Device of the Network by Communicating With the Respective Device Using the Communication Point Information
1706
Control Another Device?
1707
Yes
No
End
1708

FIG. 17A

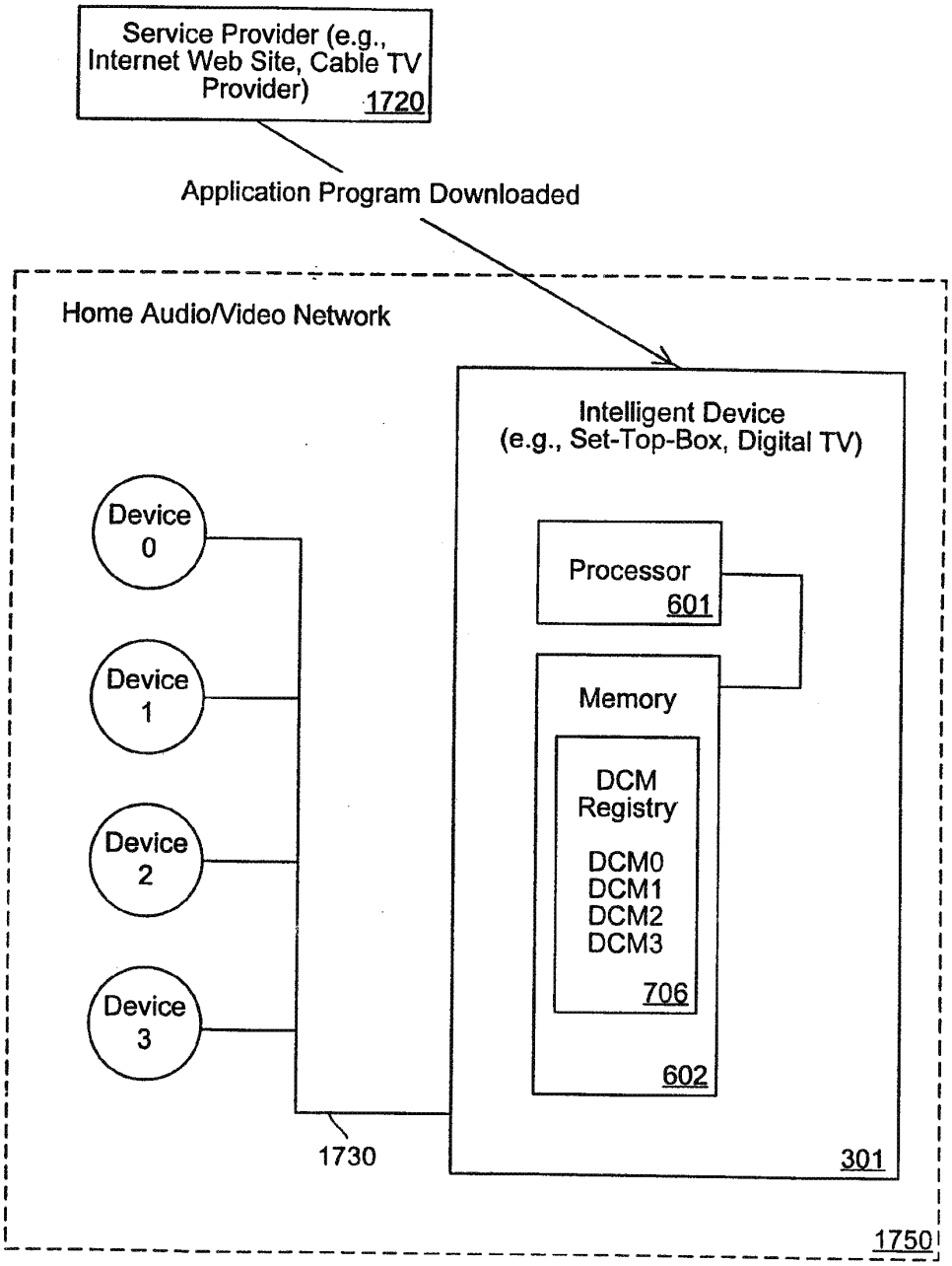

Service Provider (e.g., Internet Web Site, Cable TV Provider)
1720
Application Program Downloaded
Home Audio/Video Network
Intelligent Device (e.g., Set-Top-Box, Digital TV)
Device 0
Device 1
Device 2
Device 3
Processor
601
Memory
DCM Registry
DCM0
DCM1
DCM2
DCM3
706
602
1730
301
1750

FIG. 17B

Electronic Patent Application Fee Transmittal					
Application Number:	16670109				
Filing Date:	31-Oct-2019				
Title of Invention:	Playback Device Pairing				
First Named Inventor/Applicant Name:	Christopher Kallai				
Filer:	Jeffrey Armstrong				
Attorney Docket Number:	11-0401-CON1019A /15-1432				
Filed as Large Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		**Fee Code**	**Quantity**	**Amount**	**Sub-Total in USD($)**
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
RCE- 1ST REQUEST	1801	1	1300	1300
		Total in USD ($)		**1300**

Electronic Acknowledgement Receipt	
EFS ID:	39270887
Application Number:	16670109
International Application Number:	
Confirmation Number:	7387
Title of Invention:	Playback Device Pairing
First Named Inventor/Applicant Name:	Christopher Kallai
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0401-CON1019A /15-1432
Receipt Date:	27-APR-2020
Filing Date:	31-OCT-2019
Time Stamp:	12:37:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1300
RAM confirmation Number	E20204QC37348894
Deposit Account	132490
Authorized User	Jeffrey Armstrong
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	11-0401-CON1019A_RCE.pdf	76751 415f551bea17dee1cc063026d55fa55c7afac177	no	2
Warnings:					
This is not a USPTO supplied RCE SB30 form.					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0401-CON1019A_IDS.pdf	1054393 5fe3ae7b3f5b83798984f629a732c36757bec772	no	5
Warnings:					
Information:					
3	Foreign Reference	Foreign01_EP1058985.pdf	7947292 4d9c7f545fe5154b9bcdb51faf729ba746e11a36	no	92
Warnings:					
Information:					
4	Non Patent Literature	NPL01_Google_Response_to_Complaint_and_Notice_of_Investigation_46pages.pdf	2639516 1cc0785035d9d7df578a5ee6375ef88c31c0354c	no	46
Warnings:					
Information:					
5	Non Patent Literature	NPL02_Google_Appendix_A_2pages.pdf	77089 43fd1a1916ff05cab8f7914197dbab75e9a08612	no	2
Warnings:					
Information:					
6	Non Patent Literature	NPL03_Google_Appendix_B_176pages.pdf	8811847 b88ae5b4b8d017e4c38ec77bcb57936c42ac6ed5	no	176
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Information:					
7	Non Patent Literature	NPL04_AudioPoint_from_Home_Director_2pages.pdf	235871 90f766aaa90b98b60f2313d832564dbf866fe3ad	no	2
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Information:					
8	Non Patent Literature	NPL05_Home_Director_Audio_Point_2pages.pdf	264800 b963d11dc257081aaa80ca4098bcb4285e730046	no	2
Warnings:					
Information:					
9	Non Patent Literature	NPL06_Squeezebox_Network_Music_Player_owners_manual_22pages.pdf	24171454 92a7b99b1cd6336c401b6fa4fdc5fa72fd2a4ef0	no	22
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10	Non Patent Literature	NPL07_Logitech_Squeezebox_Owners_Manual_32pages.pdf	18710554 5ee03c1027450718dd199c8bc3b80c8358002616	no	32
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Warnings:					
Information:					
			Total Files Size (in bytes):	64019950	

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL
(Submitted Only via EFS-Web)

Application Number	16670109	Filing Date	2019-10-31	Docket Number (if applicable)	11-0401-CON1019A	Art Unit	2654
First Named Inventor	Kallai			Examiner Name	McCord, Paul C.		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

- ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
- ☐ Other _____

☒ Enclosed

- ☐ Amendment/Reply
- ☒ Information Disclosure Statement (IDS)
- ☐ Affidavit(s)/ Declaration(s)
- ☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____
(Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

☒ **The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.**
The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 132490

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

PTO/SB/30EFS (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2020-04-27
Name	Jeffrey P. Armstrong	Registration Number	54967

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432

CONFIRMATION NO. 7387

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

PUBLICATION NOTICE

OC000000115390095

Title: Playback Device Pairing

Publication No.US-2020-0084545-A1
Publication Date:03/12/2020

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently https://portal.uspto.gov/pair/PublicPair. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

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P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

107361 7590 01/28/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER
MCCORD, PAUL C

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 01/28/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

TITLE OF INVENTION: Playback Device Pairing

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	04/28/2020

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

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Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
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By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

107361 7590 01/28/2020
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

TITLE OF INVENTION: Playback Device Pairing

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$1000	$0.00	$0.00	$1000	04/28/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
MCCORD, PAUL C	2654	700-094000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1_____
2_____
3_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. Fees submitted: ❑Issue Fee ❑Publication Fee (if required) ❑Advance Order - # of Copies _____

4b. Method of Payment: *(Please first reapply any previously paid fee shown above)*

❑ Electronic Payment via EFS-Web ❑ Enclosed check ❑ Non-electronic payment by credit card (Attach form PTO-2038)

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. **Change in Entity Status** (from status indicated above)

❑ Applicant certifying micro entity status. See 37 CFR 1.29

❑ Applicant asserting small entity status. See 37 CFR 1.27

❑ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/670,109	10/31/2019	Christopher Kallai	11-0401-CON1019A /15-1432	7387

107361 7590 01/28/2020

McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2654	

DATE MAILED: 01/28/2020

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 16/670,109	Applicant(s) Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (FITF) Status No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☑ This communication is responsive to Claims filed 10/31/19 and Interview: 1/23/20.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☑ The allowed claim(s) is/are 1-20 . As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see **http://www.uspto.gov/patents/init_events/pph/index.jsp** or send an inquiry to **PPHfeedback@uspto.gov.**

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:

   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.
4. ☑ Interview Summary (PTO-413), Paper No./Mail Date. _____.
5. ☑ Examiner's Amendment/Comment
6. ☑ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Notice of Pre-AIA or AIA Status

The present application is being examined under the pre-AIA first to invent provisions.

Terminal Disclaimer

The terminal disclaimer filed on 1/22/20 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of Patents 8483853, 8788080, 9219959, 10136218 and Application 16128443 has been reviewed and is accepted. The terminal disclaimer has been recorded.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in an interview with JEFFRY ARMSTRONG on 1/23/2020.

The application has been amended as follows:

Claim 1. (Currently Amended) A playback device comprising:

a network interface configured to receive audio data over a network;

one or more speaker drivers configured to output audio based on the audio data;

one or more processors; and

tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by the one or more processors, cause the playback device to:

receive a signal from a controller over the network, wherein the signal comprises an instruction for the playback device to pair with one or more other playback devices; and

(i) process the audio data before the playback device outputs audio based on the audio data from the one or more speaker drivers, (ii) determine that either (a) the playback device is not paired with the one or more other playback devices or (b) that the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles, (iii) set an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers when the playback device is not paired with the one or more other playback devices, and (iv) change the equalization of the playback device by configuring the playback device to perform a second equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers when the playback device is paired with the one or more other playback devices.

Claim 17. (Currently Amended) A method performed by a playback device, the method comprising:

receiving a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to pair with one or more other playback devices;

receiving audio data over the network;

processing the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers based on the audio data;

when the playback device is not paired with the one or more other playback devices, setting an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles, changing the equalization of the playback device by configuring the playback device to perform a second equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers.

Claim 19. (Currently Amended) Tangible, non-transitory, computer readable memory comprising instructions encoded therein, wherein the instructions, when executed by one or more processors, cause a playback device to:

receive a signal from a controller over a network, wherein the signal comprises an instruction for the playback device to pair with one or more other playback devices; receive audio data over the network;

process the audio data before the playback device outputs audio based on the audio data from one or more speaker drivers based on the audio data;

when the playback device is not paired with the one or more other playback devices, set an equalization of the playback device by configuring the playback device to perform a first equalization of the audio data before outputting audio based on the audio data from the one or more speaker drivers; and

when the playback device is paired with the one or more other playback devices such that the playback device and the one or more other playback devices have different playback roles, change the equalization of the playback device by configuring the playback device to perform a second equalization

of the audio data before outputting audio based on the audio data from the one or more speaker drivers.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: The prior art does not reasonably teach selectively grouping a plurality of network connectable audio output devices comprising; within a user interface selecting by name one or more audio output devices to operate within a playback zone in a particular location, the zone comprising a grouping of named individual audio output devices configurable for synchronous playback of a selected media; activating the plural audio output devices of the zone to perform synchronous delivery of the media; the media delivered by the plural players derived from a first, second, etc. source based upon audio data and/or audio configuration data and wherein the particular selection of a zone or group of zones additionally maps audio channels to audio output devices in a manner which directs playback of one or more audio channels through particular instances of one or more zones and where the mapped channel playback is configured based on audio data and/or audio configuration data which additionally operates to select equalization curves for each/any audio playback device(s) in the one or more zones.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL C MCCORD whose telephone number is (571)270-3701. The examiner can normally be reached on 730-630 M-F.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on 5712727848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/PAUL C MCCORD/
Primary Examiner, Art Unit 2654

Examiner-Initiated Interview Summary	Application No. 16/670,109	Applicant(s) Kallai et al.	
	Examiner PAUL C MCCORD	Art Unit 2654	AIA (FITF) Status No

All participants (applicant, applicant's representative, PTO personnel):

(1) PAUL C. MCCORD. (3) _____.

(2) JEFFREY ARMSTRONG. (4) _____.

Date of Interview: 23 January 2020.

Type: ☑ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☑ No.
If Yes, brief description: _____.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☐ 103 ☑ Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: n/a.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Discussed included instant claim amendments and filed terminal disclaimer which obviates any double patenting rejections.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC - Searched*		
Symbol	**Date**	**Examiner**
H04R3/12	01/27/2020	pm
G06F3/165	01/27/2020	pm
H03G3/20,3005	01/27/2020	pm
H03G5/165	01/27/2020	pm
H04R5/04	01/27/2020	pm
H04R27/00	01/27/2020	pm
H04S7/30	01/27/2020	pm
H04R2227/003,005	01/27/2020	pm
H04R2420/01,07	01/27/2020	pm
H04S2400/01	01/27/2020	pm

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
700	94	01/27/2020	pm

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

Search Notes		
Search Notes	**Date**	**Examiner**
East text search H04R3/12	01/27/2020	pm
East text search G06F3/165	01/27/2020	pm
East text search H03G3/20,3005	01/27/2020	pm
East text search H03G5/165	01/27/2020	pm
East text search H04R5/04	01/27/2020	pm
East text search H04R27/00	01/27/2020	pm
East text search H04S7/30	01/27/2020	pm
East text search H04R2227/003,005	01/27/2020	pm
East text search H04R2420/01,07	01/27/2020	pm
East text search H04S2400/01	01/27/2020	pm
East text search 700/94	01/27/2020	pm
Inventor, Assignee name search	01/27/2020	pm
East text search CPC and USPC datasets	01/27/2020	pm
Google patent search	01/27/2020	pm
IP.com patent search	01/27/2020	pm
Double Patenting, Claims consultation Ahmad Matar	01/17/2020	pm
Double Patenting, Claims consultation Vivian Chin	01/27/2020	pm

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
please see above class search		01/27/2020	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC						
Symbol					Type	Version
H04R	/	3	/	12	F	2013-01-01
H04S	/	7	/	30	I	2013-01-01
H04R	/	5	/	04	I	2013-01-01
H04R	/	27	/	00	I	2013-01-01
H03G	/	5	/	165	I	2013-01-01
H03G	/	3	/	3005	I	2013-01-01
G06F	/	3	/	165	I	2013-01-01
H03G	/	3	/	20	I	2013-01-01
H04S	/	2400	/	01	A	2013-01-01
H04R	/	2420	/	07	A	2013-01-01
H04R	/	2420	/	01	A	2013-01-01
H04R	/	2227	/	005	A	2013-01-01
H04R	/	2227	/	003	A	2013-01-01

CPC Combination Sets							
Symbol					Type	Set	Ranking	Version
	/		/					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	23 January 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	9

U.S. Patent and Trademark Office — Part of Paper No.: 20200123

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	17	/	00

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**
700	94

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 20	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654 (Primary Examiner)	23 January 2020 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 9

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/670,109	Kallai et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

☑ Claims renumbered in the same order as presented by applicant ☐ CPA ☑ T.D. ☐ R.1.47

CLAIMS

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		10		19										
	2		11		20										
	3		12												
	4		13												
	5		14												
	6		15												
	7		16												
	8		17												
	9		18												

NONE (Assistant Examiner)	(Date)	Total Claims Allowed: 20	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654 (Primary Examiner)	23 January 2020 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 9

U.S. Patent and Trademark Office — Part of Paper No.: 20200123

Doc code: IDS
Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
Approved for use through 11/30/2020. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	16670109
Filing Date	2019-10-31
First Named Inventor	KALLAI; Christopher
Art Unit	
Examiner Name	TBD
Attorney Docket Number	11-0401-CON1019A

U.S.PATENTS Remove

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

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Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

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Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] i	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /P.C.M./

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16670109
	Filing Date	2019-10-31
	First Named Inventor	KALLAI; Christopher
	Art Unit	
	Examiner Name	TBD
	Attorney Docket Number	11-0401-CON1019A

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	Filing Date	2019-10-31
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	Art Unit	
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	Attorney Docket Number	11-0401-CON1019A

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	Attorney Docket Number	11-0401-CON1019A

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That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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Signature	/Brandon J. Kennedy/	Date (YYYY-MM-DD)	2019-11-21
Name/Print	Brandon J. Kennedy	Registration Number	67894

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