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.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/166,518	12/01/2020	10853023	11-0403-CON1018 (15-1433)	7844

107361 7590 11/11/2020

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):

Nicholas A.J. Millington, Santa Barbara, CA;
Sonos, Inc., Santa Barbara, CA;
Tom Cullen, Santa Barbara, CA;
Robert Reimann, Santa Barbara, CA;
Brent Lehman, Santa Barbara, CA;

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Sonos No.: 11-0403-CON1018
(MBHB No. 15-1433-US-CON4)

In the Application of:	)	
	)	
Millington	)	Art Unit: 2656
	)	
Serial No.: 16/166,518	)	Examiner: McCord
	)	
Filed: October 22, 2018	)	Confirmation No. 7844
	)	
For: Networked Playback Device	)	
	)	

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: October 23, 2020

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

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive
Chicago, Illinois 60606
Telephone (312) 913-0001

Electronic Patent Application Fee Transmittal

Application Number:	16166518
Filing Date:	22-Oct-2018
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0403-CON1018 (15-1433)

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	1000	1000

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1000**

Electronic Acknowledgement Receipt	
EFS ID:	40927140
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	23-OCT-2020
Filing Date:	22-OCT-2018
Time Stamp:	11:07:39
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	$1000
RAM confirmation Number	E20200MB08101692
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)	11-0403-CON1018_Issue_Fee_transmittal.pdf	378484 ba688409963dbedd0aebd980db1fc294c1c9c8d0	no	1
Warnings:					
Information:					
2	Miscellaneous Incoming Letter	11-0403-CON1018_Comments.pdf	87164 fd6894e3749b09aa0c1a2a57d0dd04ca71a21256	no	1
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30318 5066a76806af665dd23f50fe127701e596e0185e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	495966		

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 07/23/2020
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.
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)	7844

TITLE OF INVENTION: Networked Playback Device

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	10/23/2020

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 McDonnell Boehnen
2 Hulbert & Berghoff LLP
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 October 23, 2020

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

PTOL-85 Part B (08-18) Approved for use through 01/31/2020 OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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 07/23/2020
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: 07/23/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)	7844

TITLE OF INVENTION: Networked Playback Device

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	10/23/2020

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.

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 07/23/2020
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.
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)	7844

TITLE OF INVENTION: Networked Playback Device

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	10/23/2020

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. _____

LINKPLAY EXHIBIT 1002
Page 9 of 1292

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.
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)	7844

107361 7590 07/23/2020

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: 07/23/2020

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.** 16/166,518	**Applicant(s)** Millington 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 4/16/20; Interview: 7/17/20.
   ☐ 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 See Continuation Sheet . 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

Continuation of 3. The allowed claim(s) is/are: 1,3-9,11-16 and 18-20

Notice of Pre-AIA or AIA Status

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

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 Jeff Armstrong on 7/12/20.

The application has been amended as follows:

EXAMINER'S AMENDMENT

1. (Amended) A playback device comprising:

one or more processors; and

tangible, non-transitory computer readable memory comprising instructions stored therein, wherein the instructions, when executed, cause the playback device to perform a method comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content via a line-in connector;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

2. (Canceled) ~~The playback device of claim 1, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector~~.

9. (Amended) Tangible, non-transitory computer-readable media comprising instructions encoded therein, wherein the instructions, when executed by a playback device, cause the playback device to perform functions comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content <u>via a line-in connector</u>;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

10. (Canceled) ~~The tangible, non-transitory computer-readable media of claim 9, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.~~

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

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content; after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content via a line-in connector;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

17. (Canceled) ~~The method of claim 16, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector~~.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

The prior art does not reasonably teach the broadest reasonable interpretation of the claim based on the specification comprising a system composed of a networked audio player(s); said player(s) operable to form and participate in a playback zone of synchronized networked audio players, said player(s) comprising a loudspeaker(s), and further comprising at least a processor, memory, etc. and a line input (such as in that of figure 2A); the system functional to invoke playback by configuration of a player or players among constellation of networked player(s) (such as in instant figure 1) wherein execution of network borne commands to instantiate playback by configuration of the networked player(s) or synchronous sets thereof are driven by determination of the presence of an audio signal upon a smart line input interface such as that of instant figure 11 and wherein presence of a first signal upon the line input preempts playback of an second extant media signal and delivers the first media present on the line input using the player(s) and wherein a subsequent absence of a determined duration of the second signal extant upon the line input returns playback to the first signal and instructs the playback device to await a subsequent presence of first signal audio upon the line input. To be certain, there exist myriad telephone type devices suitable to detect voice activity input into a microphone (Lee: 20110208520); or to detect and prioritize a particular received media type using particular media type rules (Yew: 20110185048; Hamilton: 20110301728; Garg: 20070220150); furthermore such telephone and portable computer

type embodiments may comprise a microphone input wherein said microphone input is well known to double as a line input (Reid: 20110250785); however the prior art does not teach or suggest the instant networked audio player(s) comprising a dedicated line in connector integral to the audio player(s) wherein the signal upon the line input of the networked audio player(s) instantiates playback, reproduction, etc. of the line input signal upon loudspeakers of the audio player(s) and/or synchronous sets thereof based upon determination of the presence of an audio signal upon a smart line input interface which further operates to reset the networked playback device(s) and/or synchronous sets thereof in the absence of the sensed media on the line in connector of the audio player(s).

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. 16/166,518	Applicant(s) Millington 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: 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...)

Examiner called to discuss claim amendments and terminal disclaimer to which Applicant agreed.

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	

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

CPC						
Symbol					**Type**	**Version**
G06F	/	3	/	165	F	2013-01-01
H03G	/	3	/	10	I	2013-01-01
H03G	/	3	/	3026	I	2013-01-01
G11B	/	27	/	10	I	2013-01-01
H02B	/	1	/	00	I	2013-01-01
H04R	/	3	/	00	I	2013-01-01
G06F	/	3	/	162	I	2013-01-01
H04R	/	3	/	12	I	2013-01-01
H04R	/	27	/	00	I	2013-01-01
H04R	/	2227	/	005	A	2013-01-01

CPC Combination Sets								
Symbol					**Type**	**Set**	**Ranking**	**Version**
	/		/					

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	17 July 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

U.S. Patent and Trademark Office — Part of Paper No.: 20200708

LINKPLAY EXHIBIT 1002
Page 21 of 1292

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2654

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	17	/	00

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	**SUBCLASS**

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

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	17 July 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

U.S. Patent and Trademark Office — Part of Paper No.: 20200708

LINKPLAY EXHIBIT 1002
Page 22 of 1292

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington 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	1		10	16	19										
	2	9	11	17	20										
2	3	10	12												
3	4	11	13												
4	5	12	14												
5	6	13	15												
6	7	14	16												
7	8		17												
8	9	15	18												

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	17	
/PAUL C MCCORD/ Primary Examiner, Art Unit 2654	17 July 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	6

U.S. Patent and Trademark Office — Part of Paper No.: 20200708

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

CPC - Searched*		
Symbol	**Date**	**Examiner**
G06F3/162,165	07/18/2020	pm
G11B27/10	07/18/2020	pm
H02B1/00	07/18/2020	pm
H03G3/10,3026	07/18/2020	pm
H04R3/00,12	07/18/2020	pm
H04R27/00	07/18/2020	pm
H04R27/00	07/18/2020	pm

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

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
700	94	07/18/2020	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 2656	

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	Art Unit
	PAUL C MCCORD	2654

Search Notes		
Search Notes	**Date**	**Examiner**
Inventor name search	10/14/2019	pm
East text search CPC and USPC databases	10/14/2019	pm
Google patent search	10/14/2019	pm
IP.com patent search	10/14/2019	pm
East text search G06F3/162,165	07/18/2020	pm
East text search G11B27/10	07/18/2020	pm
East text search H02B1/00	07/18/2020	pm
East text search H03G3/10,3026	07/18/2020	pm
East text search H04R3/00,12	07/18/2020	pm
East text search H04R27/00	07/18/2020	pm
East text search 700/94	07/18/2020	pm
East text search CPC and USPC databases	07/18/2020	pm
IP.com patent search	07/18/2020	pm

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**
see above class search		07/18/2020	pm

/PAUL C MCCORD/ Primary Examiner, Art Unit 2656	

Bibliographic Data

Application No: 16/166,518

Foreign Priority claimed: ○ Yes ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes ☐ No ☐ Met After Allowance

Verified and Acknowledged: /PAUL C MCCORD/ (Examiner's Signature) | (Initials)

Title: Networked Playback Device

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
10/22/2018	700	2654	11-0403-CON1018 (15-1433)
RULE			

APPLICANTS

Sonos, Inc., Santa Barbara, CA, UNITED STATES

INVENTORS

Nicholas A.J. Millington, Santa Barbara, CA, UNITED STATES

Tom Cullen, Santa Barbara, CA, UNITED STATES

Robert Reimann, Santa Barbara, CA, UNITED STATES

Brent Lehman, Santa Barbara, CA, UNITED STATES

CONTINUING DATA

This application is a CON of 15583553 05/01/2017 PAT 10108393

15583553 is a CON of 14628999 02/23/2015 PAT 9686606

14628999 is a CON of 14561421 12/05/2014 PAT 9681223

14561421 is a CON of 13089167 04/18/2011 PAT 8938312

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

11/08/2018

STATE OR COUNTRY

UNITED STATES

ADDRESS

McDonnell Boehnen Hulbert & Berghoff LLP

Sonos, Inc.

300 South Wacker Drive

Chicago, IL 60606

UNITED STATES

FILING FEE RECEIVED

$1,720

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2654
Examiner Name	Paul C. McCord
Attorney Docket Number	11-0403-CON1018

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

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	20020083172		2002-06-27	KNOWLES; Gregory T. et al.	
	2	20020083342		2002-06-27	WEBB; Brian T. et al.	
	3	20020112084		2002-08-15	DEEN; Gary D. et al.	
	4	20030023411		2003-01-30	WITMER; Don. et al.	
	5	20030046703		2003-03-06	KNOWLES; Gregory T. et al.	

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

FOREIGN PATENT DOCUMENTS Remove

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	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	H08261761	JP	A	1996-10-11	NIPPON TELEGRAPH & TELEPHONE.		X

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]
	1	AudioPoint from Home Director. Play Digital Music on Your Conventional Stereo System, 2002, 2 pages. .	
	2	AudioPoint, Welcome to the coolest way to listen to digital music over your conventional stereo equipment, Home Director HD00B02, 2002, 2 pages.	
	3	Barix Download Exstreamer Software. Accessed via WayBack Machine, April 6, 2003. http://www.barix.com/estreamer/software.download.html. 2 pages. .	
	4	Barix. Exstreamer Datasheet. Accessed via WayBack Machine, April 2, 2003. http://www.barix.com/exstreamer/, 1 page.	
	5	CHINESE PATENT OFFICE, Second Office Action and Translation mailed on 13 December 2019, issued in connection with Chinese Application No. 201610817558.8, 9 pages.	X
	6	Crest Audio Pro Series 8001 Power Amplifier. V. 2.2 March 25, 1997, 2 pages.	☐
	7	Davies, Chris. Sony Ericsson MS500 Bluetooth Splashproof Speaker. http://www.slashgear.com/sony-ericsson-ms500-bluetooth-splashproof. March 17, 2009, 2 pages. .	☐

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

	8	Denon AVR-3805 A/V Surround Receiver. Datasheet, last modified 1 March 2004, 2 pages. .	☐
	9	DP-0206 TOA Digital Signal Processor. TOA Corporation, 2001, 4 pages. .	☐
	10	Exstreamer. Network MP3 player for digital audio streaming in a consumer, home installation and commercial applications. Barix Think Further. September 2002, 2 pages. .	☐
	11	Exstreamer. The Exstreamer Instruction Manual. Barix Think Further. Version 1.5 , October 2002, 21 pages. .	☐
	12	Exstreamer. The Exstreamer Technical Description: Version 1.5. Barix Think Further. October 2002, 36 pages. .	☐
	13	FireBall Digital Music Manager E-40 and E-120. Meet FireBall. The Industry's choice for managing your entire music collection. Datasheet. 2003, 2 pages.	☐
	14	Fireball E2 User's Manual. Escient. Gracenote cddb. 2000-2004, 106 pages.	☐
	15	LA Audio ZX135E 6 Zone Expander. Pro Audio Design Pro. Inc. https://www.proaudiodesign.com/products/la-audio-zx135e-6-zone-expander, accessed March 26, 2020, 6 pages. .	☐
	16	Model MRC88 Eight Zone - Eight Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2003, 102 pages.	☐
	17	Multi-Zone Control Systems. ZR-8630AV MultiZone Receiver. Niles. http://www.ampersandcom.com/zr8630av.html accessed March 26, 2020, 5 pages.	☐
	18	Non-Final Office Action mailed on 16 October 2019, issued in connection with U.S. Patent Application No. 16/166518, filed on 22 October 2018, 13 pages.	☐

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

	19	Structured Media Components. Leviton Integrated Networks, last modified 10 April 2006, 28 pages.	☐
	20	TOA Electronics, Inc. DP-0206 Digital Signal Processor. DACsys 2000, 2001, 12 pages. .	☐
	21	UPnP AV Architecture:0.83 For UPnP Version 1.0, 12 June 2002, copyright 2000, 22 pages. .	☐
	22	UPnP Forum. UPnP Device Architecture 1.0. October 15, 2008, 80 pages.	☐
	23	Wireless Home Audio Director. Wireless N Music Player with Integrated Amplifier DMC250. Datasheet. Linksys by Cisco. Fill Your Home with Music, 2008, 2 pages. .	☐
	24	Yahoo Groups. Exstreamer. Barix Exstreamer. Access via Wayback Machine http://groups.yahoo.com/group/exstreamer/ December 22, 2013, 1 page. .	☐
	25	Yamaha DME Designer 3.0 Owner's Manual; Copyright 2008, 501 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/	Date Considered	07/07/2020

*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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

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)	2020-06-10
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.**

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	TBD
Attorney Docket Number	11-0403-CON1018

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	5642171		1997-06-24	BAUMGARTNER; Donn M. et al.	
	2	6119239		2000-09-12	FUJII; Kazuo	
	3	6122749		2000-09-19	GULICK; Dale A.	
	4	6703940		2004-03-09	ALLEN; William A. et al.	
	5	7269338		2007-09-11	JANEVSKI; Angel	
	6	7313384		2007-12-25	MEENAN; Patrick et al.	
	7	8601394		2013-12-03	SHEEHAN; Conor et al.	
	8	8688431		2014-04-01	LYONS; Kenneth S. et al.	

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

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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	20050235334		2005-10-20	TOGASHI; Ryuichiro et al.	
	2	20060083388		2006-04-20	ROTHSCHILD; Leigh M.	
	3	20070053514		2007-03-08	IMAI; Shigeru et al.	
	4	20070220150		2007-09-20	GARG; Gopal K.	
	5	20080109852		2008-05-08	KRETZ; Martin H. et al.	
	6	20090006968		2009-01-01	TRASK; Keoki et al.	
	7	20100332565		2010-12-30	AL-SHAYKH OSAMA . et al.	
	8	20110301728		2011-12-08	HAMILTON; Robert et al.	
	9	20120304233		2012-11-29	ROBERTS; Brian F. et al.	

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

FOREIGN PATENT DOCUMENTS Remove

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	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	101053152	CN	A	2007-10-10	HARMAN INT IND [US]		☒
	2	101127987	CN	A	2008-02-20	XEROX CORP [US]		☒
	3	101212827	CN	A	2008-07-02	LG ELECTRONICS CO LTD SHANGHAI [CN]		☒
	4	101320292	CN	A	2008-12-10	LIE LIN [CN]		☒
	5	101501775	CN	A	2009-08-05	MICROSOFT CORP [US]		☒
	6	1669240	CN	A	2005-09-14	SONY ERICSSON MOBILE COMM AB [SE]		☒
	7	2978240	EP	A1	2016-01-27	SONOS INC [US]		☐
	8	2005136457	JP	A	2005-05-26	SANYO ELECTRIC CO.		☒
	9	9709756	WO	A2	1997-03-13	BUCALO BRIAN D [US], et al.		☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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	CHINESE PATENT OFFICE, First Office Action and Translation mailed on 12 March 2019, issued in connection with Chinese Application No. 201610817558.8, 17 pages.	
	2	CHINESE PATENT OFFICE, First Office Action mailed on 22 February 2019, issued in connection with Chinese Application No. 201710076046.5, 15 pages.	☒
	3	CHINESE PATENT OFFICE, Second Office Action and Translation mailed on 4 November 2019, issued in connection with Chinese Application No. 201710076046.5, 18 pages.	☐
	4	JAPANESE PATENT OFFICE, Office Action mailed on 29 October 2019, issued in connection with Japanese Patent Application No. 2019-001932, 6 pages.	☒
	5	Sonos, Inc. v. Implicit, LLC: Declaration of Roman Chertov in Support of the Inter Partes Review of U.S. Patent No. 7,391,791 dated March 9, 2018, 92 pages.	☐
	6	Sonos, Inc. v. Implicit, LLC: Declaration of Roman Chertov in Support of the Inter Partes Review of U.S. Patent No. 8,942,252 dated March 9, 2018, 81 pages.	☐
	7	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit A, filed October 14, 2019, 3 pages.	☐
	8	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit C, filed October 14, 2019, 16 pages.	☐
	9	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit D, filed October 14, 2019, 36 pages.	☐
	10	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit E, filed October 14, 2019, 21 pages.	☐

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

	11	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint, filed October 14, 2019, 66 pages.	☐
	12	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' First Amended Answer and Counterclaims to Plaintiff's Complaint, filed November 14, 2019, 66 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/	Date Considered	07/07/2020

*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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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)	2019-11-25
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.**

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./

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

		"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" | "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" | "20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128").PN.				
S228	200	("20050125222" | "20050125357" | "20050131558" | "20050144284" | "20050147261" | "20050154766" | "20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050195999" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

		"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" | "20070220150" | "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" | "20080109852" | "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" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130226323" | "20130230175" | "20130232416" | "20130236029" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706").PN.				
S229	258	("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" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

		"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" | "5197099" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5519641" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5640388" | "5642171" | "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" | "6119239" | "6122668" | "6122749" | "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" | "6703940" | "6704421" | "6741961" | "6757517" | "6763274" | "6778073" | "6778493" | "6778869" | "6803964" | "6809635" | "6816510" | "6816818" | "6823225" | "6826283" | "6836788" | "6839752" | "6859460" | "6859538" | "6870934" | "6873862" | "6882335" | "6889207" | "6898642" | "6901439" | "6907458" | "6912610" | "6915347" | "6916980" | "6917592" | "6919771" | "6920373" | "6931134" | "6931557" | "6934766" | "6937988" | "6970482" | "6985694" | "6987767" | "6987947" | "7007106" | "7020791" | "7043477" | "7043651").PN.				
S230	280	("7046677" | "7047308" | "7054888" | "7058889" | "7068596" | "7072477" | "7092528" | "7092694" | "7096169" | "7113999" | "7115017" | "7120168" | "7130316" | "7130368" | "7130608" | "7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "7197148" | "7206367" | "7206618" | "7206967" | "7209795" | "7218708" | "7236739" | "7236773" | "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" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

"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" |

		"8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8601394" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009" | "8688431" | "8700730" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8788080" | "8818538" | "8819554" | "8843224" | "8843228" | "8843586" | "8855319" | "8861739" | "8879761" | "8885851" | "8886347" | "8904066").PN.				
S231	118	("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" |	US-PGPUB; USPAT	OR	ON	2020/03/09 11:27

		"D506463" | "D515072" | "D515557" | "D518475" | "D524296" | "D527375" | "RE41608").PN.				
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
S258	5	"8212505"	US-PGPUB; USPAT; USOCR	OR	ON	2020/03/10 13:42
S259	0	("10193489").URPN.	USPAT	OR	ON	2020/03/10 13:42
S260	1	"20100134058"	USPAT	OR	ON	2020/03/10 13:42
S261	3	"20100134058"	US-PGPUB; USPAT; DERWENT	OR	ON	2020/03/10 13:42

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

		"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" |			

		"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.				
S274	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" |	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22

		"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" | "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.				
S275	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" |	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22

		"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" | "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" | "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.				
S276	280	("7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "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" |	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22

"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").PN.				
S277	95	("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.	US-PGPUB; USPAT	OR	ON	2020/04/03 09:22
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

		"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" | "20040041836" | "20040042629" | "20040044742" | "20040048569" | "20040059842" | "20040059965" | "20040066736" |			

		"20040071299" | "20040075767" | "20040078383" | "20040080671" | "20040093096" | "20040098754" | "20040111473" | "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").PN.				
S290	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" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060072489" | "20060095516" | "20060098936" | "20060119497" | "20060143236" | "20060149402" | "20060155721" | "20060173844" | "20060179160" | "20060193454" | "20060193482" | "20060199538" | "20060205349" | "20060222186" | "20060227985" | "20060229752" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

		"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").PN.				
S291	255	("20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "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" | "20150304288" | "20150365987" | "3956591" | "4105974" | "4296278" | "4306114" | "4382158" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

"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" | "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").PN.				
S292	280	("6987767" | "6987947" | "7007106" | "7020791" | "7043477" | "7043651" | "7046677" | "7047308" | "7054888" | "7058889" | "7068596" | "7072477" | "7092528" | "7092694" | "7096169" | "7113999" | "7115017" | "7120168" | "7130316" | "7130368" | "7130608" | "7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "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" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

		"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.				
S293	116	("8917877" | "8923997" | "8930006" | "8934647" | "8934655" | "8942252" |	US-PGPUB; USPAT	OR	ON	2020/04/14 16:50

		"8942395" | "8954177" | "8965544" | "8965546" | "8966394" | "8977974" | "8984442" | "9020153" | "9042556" | "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.				
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

		"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" | "20070220150" | "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" | "20080109852" | "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" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029").PN.				
S392	253	("20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "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" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

"3956591" | "4105974" | "4296278" |
"4306114" | "4382158" | "4509211" |
"4530091" | "4696037" | "4701629" |
"4712105" | "4731814" | "4816989" |
"4824059" | "4845751" | "4994908" |
"4995778" | "5086385" | "5151922" |
"5153579" | "5182552" | "5185680" |
"5197099" | "5237327" | "5239458" |
"5272757" | "5299266" | "5361381" |
"5372441" | "5406634" | "5430485" |
"5440644" | "5457448" | "5467342" |
"5481251" | "5491839" | "5515345" |
"5519641" | "5533021" | "5553147" |
"5553222" | "5553314" | "5596696" |
"5602992" | "5623483" | "5625350" |
"5640388" | "5642171" | "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" |
"6119239" | "6122668" | "6122749" |
"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" | "6703940" | "6704421" | "6741961" | "6757517" | "6763274" | "6778073" | "6778493" | "6778869" | "6803964" | "6809635" | "6816510" | "6816818" | "6823225" | "6826283" | "6836788" | "6839752" | "6859460" | "6859538" | "6870934" | "6873862" | "6882335" | "6889207" | "6898642" | "6901439").PN.				
S393	280	("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" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "7197148" | "7206367" | "7206618" | "7206967" | "7209795" | "7218708" | "7236739" | "7236773" | "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" | "7631119" | "7643894" | "7653344" | "7657224" | "7657644" | "7657910" | "7665115" | "7668990" | "7669113" | "7669219" | "7672470" | "7675943" | "7676044" | "7676142" | "7688306" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

"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" | "8457334" | "8463184" |
"8463875" | "8473844" | "8477958" |
"8483853" | "8498726" | "8509211" |
"8520870" | "8565455" | "8577045" |
"8577048" | "8588432" | "8588949" |
"8600075" | "8600084" | "8601394" |
"8611559" | "8615091" | "8620006" |
"8639830" | "8654995" | "8672744" |
"8683009").PN.

S394	137	("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.	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50
S395	203	("20030100335" | "20060281409" | "20160234615" | "7215649" | "9344206" | "20020083172" | "20020083342" | "20020112084" | "20020129128" | "20030023411" | "20030046703" | "20040203936" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"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" | "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.				
S396	200	("20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050144284" | "20050147261" | "20050154766" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"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" | "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" | "20070220150" | "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" | "20080109852" | "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" | "20130124664" | "20130129122" | "20130132837" | "20130159126" | "20130167029").PN.				
S397	253	("20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "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" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"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" | "5197099" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5519641" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5640388" | "5642171" | "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" | "6119239" | "6122668" | "6122749" |			

		"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" | "6703940" | "6704421" | "6741961" | "6757517" | "6763274" | "6778073" | "6778493" | "6778869" | "6803964" | "6809635" | "6816510" | "6816818" | "6823225" | "6826283" | "6836788" | "6839752" | "6859460" | "6859538" | "6870934" | "6873862" | "6882335" | "6889207" | "6898642" | "6901439").PN.				
S398	280	("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" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "7197148" | "7206367" | "7206618" | "7206967" | "7209795" | "7218708" | "7236739" | "7236773" | "7257398" | "7260616" | "7263110" | "7269338" | "7277547" | "7286652" | "7289631" | "7293060" | "7295548" | "7302468" | "7305694" | "7308188" | "7310334" | "7312785" | "7313384" | "7313593" | "7319764" | "7324857" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"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" | "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" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853" | "8498726" | "8509211" | "8520870" | "8565455" | "8577045" | "8577048" | "8588432" | "8588949" | "8600075" | "8600084" | "8601394" | "8611559" | "8615091" | "8620006" | "8639830" | "8654995" | "8672744" | "8683009").PN.				
S399	137	("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" |	US-PGPUB; USPAT	OR	ON	2020/07/04 13:50

		"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.				
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				

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20190121604"	US-PGPUB; USPAT	OR	ON	2020/07/18 07:34
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	US-PGPUB; USPAT	OR	ON	2020/07/17 17:15

		H04R3/04 H04R3/12 H04R3/06 H04R3/08 H04R3/14 H04R3/00 OR H04R3/12).CPC.)				
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

7/18/2020 7:37:27 AM
C:\Users\pmccord\Documents\EAST\Workspaces\kallai_new_9_19.wsp

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Sonos No.: 11-0403-CON1018
(MBHB No. 15-1433-US-CON4)

In the Application of:	)	
	)	
Millington	)	Art Unit: 2656
	)	
Serial No.: 16/166,518	)	Examiner: McCord
	)	
Filed: October 22, 2018	)	Confirmation No. 7844
	)	
For: Networked Playback Device	)	
	)	

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

APPLICANT SUMMARY OF
EXAMINER-INITIATED INTERVIEW

A telephonic examiner interview took place on July 17, 2020. Participants included Examiner Paul McCord and Applicant's Representative, Jeff Armstrong. During the interview, Examiner McCord requested that Applicant file a terminal disclaimer relative to U.S. Pat. 8,938,312. No exhibits were shown and no demonstrations were conducted.

Applicant disagrees that the claims of the present application are not patentably distinct from the claims of U.S. Pat. 8,938,312. Nevertheless, without conceding the merits of any potential double patenting rejections, Applicant submits herewith a terminal disclaimer relative to U.S. Pat. 8,938,312.

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

McDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE
CHICAGO, ILLINOIS 60606
TELEPHONE (312) 913-0001

If further discussion would advance the application to allowance, Applicant invites the Examiner to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: July 17, 2020

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

Electronic Acknowledgement Receipt	
EFS ID:	40038808
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	17-JUL-2020
Filing Date:	22-OCT-2018
Time Stamp:	18:09:33
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	Applicant summary of interview with examiner	11-0403-CON1018_Interview_Summary.pdf	67553 c6f060a261c1c8638978590e35e6d99ef6752df1	no	2

Warnings:

Information:	
Total Files Size (in bytes):	67553

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.

Doc Code: DIST.E.FILE **Document Description: Electronic Terminal Disclaimer - Filed**	PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce

Electronic Petition Request	**TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT**
Application Number	16166518
Filing Date	22-Oct-2018
First Named Inventor	Nicholas Millington
Attorney Docket Number	11-0403-CON1018 (15-1433)
Title of Invention	Networked Playback Device

☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action

☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.

Owner	Percent Interest
Sonos, Inc.	100%

The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s)

8938312

as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later:
- expires for failure to pay a maintenance fee;
- is held unenforceable;
- is found invalid by a court of competent jurisdiction;
- is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
- has all claims canceled by a reexamination certificate;
- is reissued; or
- is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

◉ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

○ I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.
Applicant claims the following fee status: ○ Small Entity ○ Micro Entity ◉ Regular Undiscounted I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.
THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES I certify, in accordance with 37 CFR 1.4(d)(4) that I am: ◉ An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application Registration Number 54967 ○ A sole inventor ○ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application ○ A joint inventor; all of whom are signing this request

Signature	/Jeffrey P. Armstrong/
Name	Jeffrey P. Armstrong

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	16166518
Filing Date:	22-Oct-2018
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Filer:	Jeffrey Armstrong
Attorney Docket Number:	11-0403-CON1018 (15-1433)

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	1814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

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

Doc Code: DISQ.E.FILE
Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 16166518

Filing Date: 22-Oct-2018

Applicant/Patent under Reexamination: Millington

Electronic Terminal Disclaimer filed on July 17, 2020

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt	
EFS ID:	40038768
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	17-JUL-2020
Filing Date:	22-OCT-2018
Time Stamp:	18:07:52
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$160
RAM confirmation Number	E20207GI07489521
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	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	33345 4fd2cf2da01ce0c80f444cb8773afbde45a3df4b	no	2
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30539 6b9f8109ccf6680a868d2c16198dcbac97ec132a	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	63884		

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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2654
Examiner Name	Paul C. McCord
Attorney Docket Number	11-0403-CON1018

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

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	20020083172		2002-06-27	KNOWLES; Gregory T. et al.	
	2	20020083342		2002-06-27	WEBB; Brian T. et al.	
	3	20020112084		2002-08-15	DEEN; Gary D. et al.	
	4	20030023411		2003-01-30	WITMER; Don. et al.	
	5	20030046703		2003-03-06	KNOWLES; Gregory T. et al.	

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

FOREIGN PATENT DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	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	H08261761	JP	A	1996-10-11	NIPPON TELEGRAPH & TELEPHONE.		X

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]
	1	AudioPoint from Home Director. Play Digital Music on Your Conventional Stereo System, 2002, 2 pages. .	
	2	AudioPoint, Welcome to the coolest way to listen to digital music over your conventional stereo equipment, Home Director HD00B02, 2002, 2 pages.	
	3	Barix Download Exstreamer Software. Accessed via WayBack Machine, April 6, 2003. http://www.barix.com/estreamer/software.download.html. 2 pages. .	
	4	Barix. Exstreamer Datasheet. Accessed via WayBack Machine, April 2, 2003. http://www.barix.com/exstreamer/, 1 page.	
	5	CHINESE PATENT OFFICE, Second Office Action and Translation mailed on 13 December 2019, issued in connection with Chinese Application No. 201610817558.8, 9 pages.	X
	6	Crest Audio Pro Series 8001 Power Amplifier. V. 2.2 March 25, 1997, 2 pages.	☐
	7	Davies, Chris. Sony Ericsson MS500 Bluetooth Splashproof Speaker. http://www.slashgear.com/sony-ericsson-ms500-bluetooth-splashproof. March 17, 2009, 2 pages. .	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

	8	Denon AVR-3805 A/V Surround Receiver. Datasheet, last modified 1 March 2004, 2 pages. .	☐
	9	DP-0206 TOA Digital Signal Processor. TOA Corporation, 2001, 4 pages. .	☐
	10	Exstreamer. Network MP3 player for digital audio streaming in a consumer, home installation and commercial applications. Barix Think Further. September 2002, 2 pages. .	☐
	11	Exstreamer. The Exstreamer Instruction Manual. Barix Think Further. Version 1.5 , October 2002, 21 pages. .	☐
	12	Exstreamer. The Exstreamer Technical Description: Version 1.5. Barix Think Further. October 2002, 36 pages. .	☐
	13	FireBall Digital Music Manager E-40 and E-120. Meet FireBall. The Industry's choice for managing your entire music collection. Datasheet. 2003, 2 pages.	☐
	14	Fireball E2 User's Manual. Escient. Gracenote cddb. 2000-2004, 106 pages.	☐
	15	LA Audio ZX135E 6 Zone Expander. Pro Audio Design Pro. Inc. https://www.proaudiodesign.com/products/la-audio-zx135e-6-zone-expander, accessed March 26, 2020, 6 pages. .	☐
	16	Model MRC88 Eight Zone - Eight Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2003, 102 pages.	☐
	17	Multi-Zone Control Systems. ZR-8630AV MultiZone Receiver. Niles. http://www.ampersandcom.com/zr8630av.html accessed March 26, 2020, 5 pages.	☐
	18	Non-Final Office Action mailed on 16 October 2019, issued in connection with U.S. Patent Application No. 16/166518, filed on 22 October 2018, 13 pages.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

	19	Structured Media Components. Leviton Integrated Networks, last modified 10 April 2006, 28 pages.	☐
	20	TOA Electronics, Inc. DP-0206 Digital Signal Processor. DACsys 2000, 2001, 12 pages. .	☐
	21	UPnP AV Architecture:0.83 For UPnP Version 1.0, 12 June 2002, copyright 2000, 22 pages. .	☐
	22	UPnP Forum. UPnP Device Architecture 1.0. October 15, 2008, 80 pages.	☐
	23	Wireless Home Audio Director. Wireless N Music Player with Integrated Amplifier DMC250. Datasheet. Linksys by Cisco. Fill Your Home with Music, 2008, 2 pages. .	☐
	24	Yahoo Groups. Exstreamer. Barix Exstreamer. Access via Wayback Machine http://groups.yahoo.com/group/exstreamer/ December 22, 2013, 1 page. .	☐
	25	Yamaha DME Designer 3.0 Owner's Manual; Copyright 2008, 501 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2654
	Examiner Name	Paul C. McCord
	Attorney Docket Number	11-0403-CON1018

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)	2020-06-10
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.**

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.

Method for canceling offset in measurement with gyro

Abstract

PURPOSE: To accurately cancel an offset by a method wherein measurement of an offset angle velocity is executed again when the angle velocity in the measuring of the offset angle velocity exceeds a predetermined value.
CONSTITUTION: An amplitude detection circuit 6 detects a maximum amplitude value App in the variation of an angle velocity signal (wa) obtained during the measuring. A control circuit 7 inputs the maximum amplitude value App, and compares it with a predetermined threshold level S1. When the compared result is App ≥S1, the measurement is repeated by controlling an integrating circuit 3 and the circuit 6 and when the result is App<S1, the measurement is stopped at that time. Before offset cancel is executed, an offset angle velocity signal (wo) is measured. At that time, an object 2 to be measured and a gyro 1 are stopped, the angle velocity signal (wa) that the gyro 1 outputs is integrated by the integrating circuit 3 and the maximum amplitude value App of the angle velocity signal (wa) is detected by the circuit 6. When a predetermined measuring time has passed, a primary measurement is completed.

COPYRIGHT: (C)1996,JPO

Find Prior Art Similar

Other languages:

Inventor:

Worldwide applications

1995 JP

Application JP8866195A events

1995-03-23 Application filed by Nippon Telegr & Teleph Corp <Ntt>, 日本電信電話株式会社

1995-03-23 Priority to JP8866195A

1996-10-11 Publication of JPH08261761A

2020-01-03 Application status is Pending

Info:

External links:

Claims (2)

Hide Dependent

[The claims]

Description

DETAILED DESCRIPTION OF THE INVENTION

[0001]

The present invention relates, in position measurement of the construction machine or the like performed using a gyro, it relates to an offset canceling method for improving measurement accuracy.

[0002]

BACKGROUND ART Mobile of the construction machine, especially in a tunnel excavating machine, it is necessary to measure its operating position with high accuracy, the measurement method using the gyro recently have been used. This gyro measurement, to detect the angle by integrating the angular velocity signal obtained by the gyro time, the angle signal displacement is detected by the integrating the distance detected by another rangefinder, tunnel boring machines, etc or not how displaced in any angle direction from the reference position can be measured.

[0003] In such a gyro measurement, in general, the following two are known as a major error. The first is due to a temperature change of use environment. That is, when the gyro is used in different temperature environments and during production, parts sensitivity varies in thermal deformation for the angular velocity. The second is due to the earth's rotation. That is, the gyro is to measure the absolute body velocity in the inertial system, it would like a normal user is a relative angular velocity with respect to

the earth. Therefore, the angular velocity can not be obtained necessary unless removed earth's rotation component.
This error depends latitude on the earth to be used.

[0004] The above two error is constant under the same environment of use, it can be regarded as a steady-state deviation. Focusing on this, conventionally, error elimination method called offset cancellation is used. The block diagram for realizing this is shown in FIG.

[0005] In FIG. 6, the gyro 1 is fixed on the object 2, such as a construction machine. First, prior to execution of the position measurement of the object 2, it is stationary and the object 2 in the environment of use to measure the angular velocity of there. Gyro 1
A certain time integration at an angular velocity signal ωa an integrating circuit 3 obtained in by dividing this by measuring time, an average angular velocity of the stationary state. Since this should originally zero, stored in the memory 4 and the average angular velocity as an offset velocity signal .omega.o.

[0006] Then, the actual output angular velocity signal ωa gyro 1 obtained during the movement of the object 2, by subtracting the offset angular velocity component ωo stored in the memory 4 in the subtraction circuit 5, an offset is canceled the final angular velocity signal ω is obtained.

[Problems that the Invention is to Solve

[0007] In order to perform such an offset cancellation, it is necessary to freeze the object 2 when measuring the offset angular velocity. However, as the tunnel boring machine, for the equipment to be used in outdoor construction site,
It is difficult to perform the offset cancellation correctly.

[0008] This occurs external vibration when a vehicle or the like around passes, because thereby moving object in an offset angular velocity measurement. In this case, the gyro despite moving the object, thereby recognizing therebetween angular velocity as resting value.

In particular, in recent tunneling begins to spread trenchless method, must generally vehicle performs position measurement in the basement of the road traffic is occurring. In this case, even if all to stop the machine for the construction work, the disturbance occurs. For the above reasons, a method of accurately performing the offset cancel conditions disturbance is present has been desired.

[0010] The first object of the present invention is to be able to obtain the offset angular velocity at a timing that is not affected by the disturbance, it is to correct offset cancellation to so allow.

A second object is to separate the electrical noise disturbance and gyro occurs, more precisely as can be obtained offset angular velocity, is that the correct offset cancellation to so allow.

[0012]

The first invention for achieving the SUMMARY OF THE INVENTION The first object in advance by measuring the offset angular upon gyro stopped, from then measured movement velocity subtracting the offset angular velocity, in offset cancellation method for obtaining error-free angular velocity, change in velocity in the offset angular velocity measurement, again performs a measurement of the offset angular velocity in the case of more than a preset value, a change in the angular velocity is less than the value set Me **該予**and configured to Ossett angular measurement angular velocity of the time.

[0013] The second invention for achieving the second object, advance to measure the offset angular upon gyro stopped, then subtracting the offset angular from motion velocity measured to obtain error-free angular velocity in offset cancel method, comprising means for measuring the acceleration of the gyroscope, when the acceleration was the measurement of the above preset value, again performs the measurement of the offset angular velocity, when less than a value above acceleration is set Me **該予**the measured angular velocity was configured to the Ossett angular velocity.

[0014]

[Action] For the first invention, if the stationary object,
The change because the offset angular velocity is constant should small. Thus, by measuring the change in the angular velocity at rest,
When the change is greater than the threshold value, it is judged that there is a disturbance, redo the measurement, it is judged that there is no disturbance when the change is small than the threshold value, taking the angular velocity measured at that time as an offset angular velocity.

[0015] The second aspect of the invention, the angular velocity signal gyro output has a one noise of the electric circuit is superimposed on the true angular velocity. For this reason, when the disturbance vibration is small,
Difficult determine by those or electrical noise fluctuations in the output value due to a disturbance. Therefore, in the second invention, the accelerometer detects the acceleration of the gyro takes in the angular velocity signal when the acceleration change is less than the threshold value as an offset angular velocity. Since electrical noise accelerometer is much smaller than the gyro electrical noise, it is possible to obtain an offset angular velocity also eliminates electrical noise and comparable small disturbance of the gyro.

[0016]

EXAMPLES The present invention, which disturbances occur tunnel boring machines, etc. is focused on the fact that irregular intermittent, automatically selects the disturbance-free time zone (timing), to measure the offset angular velocity is there. That is, the disturbance which was conventionally removed impossible, because it is ground vibration due general a vehicle or the like passing around, by measuring an offset angular remove the timing such as vehicles pass, it is possible to obtain a correct offset angular velocity, it is possible to perform the offset cancellation using this correctly.

[0017] Hereinafter, an embodiment of the present invention. Figure 1 is a block diagram for implementing the offset cancel of the first embodiment. Identical to those in FIG 6 described above is denoted by the same reference numerals. 6 is a amplitude detection circuit, for detecting a maximum amplitude value App of the change in the angular velocity signal ωa obtained during the measurement period (p-p value). 7 inputs the maximum amplitude value App, a control circuit for comparing the threshold value S1, which is set in advance, if the comparison result App ≧ S1, again measured by controlling the integrating circuit 3 and the amplitude detecting circuit 6 It was performed, if App <S1, stops there measurement.

[0018] shows the waveform of the angular velocity signal ωa to be output from the gyro 1 in FIG. The angular velocity signal ωa is offset angular velocity signal ωo by Earth's rotation and thermal deformation, the gyro 1
Electrical noise An, variation due to disturbance vibration As the internal circuit of the
It includes and the like.

[0019] When performing offset cancel, as in the prior art, first, to measure the offset angular velocity signal .omega.o. In this case, the gyro 1 was quiescent object 2 also is held stationary, the angular velocity signal ω to the gyro 1 outputs
With integrating a by integrator circuit 3 detects the maximum amplitude value App of change of the angular velocity signal ωa in the amplitude detection circuit 6. When

a certain measurement time (a few seconds to a few minutes) has elapsed,
To end the first measurement N1.

[0020] determines whether the control circuit 7 maximum amplitude value App during this measurement period is greater than the threshold value S1, which is set in advance. The threshold S1 is electrical noise An since it is set slightly larger than those due to electrical noise An
Will not be detected.

[0021] In the measuring N1 of first described above, as shown in FIG. 2, contains the disturbance vibration As in the measurement time, the threshold value S1
If the value of the maximum amplitude App than is greater. Therefore, the control circuit 7 issues a command to perform the re-measured for integration circuit 3 and an amplitude detection circuit 6, performs a second measurement N2. Is larger than the threshold value S1 is towards the detected amplitude value App amplitude detection circuit 6 also measured N2 of the second.

[0022] Therefore, issues a command to the control circuit 7 is performed again measured for integration circuit 3 and an amplitude detection circuit 6. Less than,
Similarly to the direction of the detected maximum amplitude App amplitude detection circuit 6 is smaller than the threshold value S1, the measurement is repeated.

[0023] As described above, when it had smaller than the maximum amplitude App threshold S1 of the angular velocity signal in N th measurement Nn is determined by the control circuit 7, wherein the first command control circuit 7 is measurement end the issue. Subsequently, the N-th-th measurement N
The integration result obtained in the integrating circuit 3 with n divided by the measurement time, and calculates the average angular velocity, which is stored in the memory 4 as an offset angular velocity signal .omega.o. Further, the control circuit 7 informs the relative operator that the measurement of the offset angular velocity is terminated, the display is had a speaker or the like (not shown).

[0024] Using the offset angular velocity signal ωo measured as described above, and thereafter, starts the measurement of the actual motion velocity. As already mentioned, among the gyro measurement angular velocity, maximum error portion is offset angular velocity according to the Earth's rotation and thermal deformation. Object to be measured (a) in FIG. 3 2
It shows the measurement angular velocity signal ωa during exercise. The offset angular velocity signal ωo is stored in the memory 4, do it by subtracting the subtracting circuit 5 an offset angular velocity signal ωo from the measured angular velocity signal .omega.a, as shown in FIG. 3 (b), finally steady-state error it is possible to obtain a free angular velocity signal omega.

[0025] FIG. 4 is a block diagram for implementing an offset cancellation in the second embodiment. Denoted by the same reference numerals identical to those in FIG. Here, fixed installed accelerometer 8 in addition to the gyro 1 with respect to the object 2, the amplitude detecting circuit 9 the output signal of the accelerometer 8 Maximum amplitude Bpp the connected and detected by the amplitude detection circuit 9 to
In advance it is compared with a threshold value S2 set, to issue a measurement command again with respect to the amplitude detection circuit 9 and the integrator circuit 3 when its maximum amplitude Bpp is not less than the threshold value S2 in the control circuit 10.

[0026] Now, when the offset cancel command is applied from outside, are kept stationary object 2, together with the integration circuit 3 integrates the angular velocity signal ωa to output of the gyro 1, the acceleration signal output from the accelerometer 8 maximum amplitude Bpp change in B is detected by the amplitude detection circuit 6.

[0027] The waveform of the output acceleration signal B of the accelerometer 8 (a) Fig. 5 shows a waveform of the output angular velocity signal ωa gyro 1 in the figure (b). Output acceleration signal B of the accelerometer 8
Since the include, but are vibrating Bs and electrical noise Bn by external vibration, electrical noise Bn accelerometer 8 is much smaller than the electrical noise An gyro 1, the accelerometer 8
At the output acceleration signals in B, we can clearly distinguish component of the disturbance vibration Bs to electrical noise Bn. Therefore, it is set slightly larger than the electrical noise Bn for generating a threshold value S2 of the control circuit 10 in the accelerometer 9.

[0028] From the above, when the maximum amplitude Bpp of change in acceleration signal B obtained by the accelerometer 8 is not less than the threshold value S2, which is set to the control circuit 10, the measurement again issues a command to the integrator circuit 3 and the amplitude detection circuit 9 repeat. In N th measurement Nn, When the maximum amplitude Bpp of change in acceleration signal B obtained by the accelerometer 8 is smaller than the threshold value S2, and the measurement ends, the measurement time integration result of the integration circuit 3 at that time split, stores the average angular velocity obtained in the memory 4 as an offset angular velocity signal .omega.o. Subsequent operations are the same as in the first embodiment described above.

[0029] In the second embodiment, a disturbance vibration in an offset angular velocity measuring, since measured by the accelerometer 8, it is easy reliably to separate the disturbance vibration and electrical noise,
The sensitivity higher can be detected for a small disturbance, for avoiding the incorporation measured angular velocity at that timing as an offset angular, so that it is accurate measurement of the offset angular velocity.

[0030]

According the above, according to the present invention in a first aspect, the change in the angular velocity in the offset angular velocity measurement, since again perform measurement of the offset angular velocity in the case of more than a preset value, by repeating this, disturbance vibration it is possible to measure the offset angular velocity at the time when is not applied. Therefore, with respect to the object to be measured disturbance is applied intermittently irregular as civil engineering machinery, it is possible to obtain an accurate offset angular in which the influence of disturbance, it is possible to realize an accurate offset cancellation to become.

According to the second invention, because the measurement again offset angle in the case of more than the value acceleration applied to the object to be measured is set in advance, the micro disturbance of electric noise as much generated inside the gyro is generated even when, can measure the offset angular velocity to avoid this, to allow removal of the exact disturbances than the first invention.

BRIEF DESCRIPTION OF THE DRAWINGS

1 is a block diagram for implementing the offset canceling method of the first embodiment of the present invention.

2 is a waveform diagram for explaining the measurement of the offset angular velocity according to the first embodiment.

3 is a waveform diagram of the angular velocity signal before (a) and after (b) of the offset cancellation according to the first embodiment.

4 is a block diagram for implementing the offset canceling method of the second embodiment.

5 is a waveform diagram of the acceleration signal (a) and angular velocity signal (b) of the second embodiment.

6 is a block diagram for implementing a conventional offset canceling method.

DESCRIPTION OF SYMBOLS

1: Gyro, 2: DUT, 3: integrating circuit, 4: memory, 5: subtraction circuit, 6: amplitude detection circuit, 7: control circuit,
8: accelerometer, 9: amplitude detecting circuit, 10: control circuit.

Cited By (4)

Publication number	Priority date	Publication date	Assignee	Title
*	2005-08-01	2008-11-27	トヨタ自動車株式会社	Apparatus and method for correcting zero point of angular velocity sensor
*	2013-11-15	2017-03-30	ベリファイ・エルエルシー	Gyroscope rotation monitoring system
*	2015-11-16	2017-05-26	富士通株式会社	Information processing device, method, and program
*	2017-06-12	2018-12-20	富士フイルム株式会社	Shake detection device, image-capturing device, lens device, image capturing device body, shake detection method, and shake detection program

Family To Family Citations

* Cited by examiner, † Cited by third party, ‡ Family to family citation

Similar Documents

Publication	Publication Date	Title
	2012-05-23	Sensor-based orientation system
	2003-05-20	Sensor having a resonance structure, especially an acceleration or rotation rate sensor, and a device for carrying out a self-test
	2014-05-07	Measuring borehole survey tool orientation using microgyros
	1993-06-15	Vehicle navigation apparatus
	2004-05-18	Method for improving the measurement values of an inertial measurement system
	2008-03-20	Vehicle dynamics conditioning method on MEMS based integrated INS/GPS vehicle navigation system
	2006-12-28	Apparatus and method for measuring speed of a moving object
	1996-02-07	Offset correction for gyroscope
	2007-05-03	Systems and methods for reducing vibration-induced errors in inertial sensors
	1997-02-19	Vehicle stop detection device and method
	2011-11-23	Gps-based in-vehicle sensor calibration algorithm
	2005-01-27	Method and apparatus for measuring speed of moving body using accelerometer
	2008-04-15	Apparatus for correcting and diagnosing angular rate sensors installed in an automotive vehicle
	2017-09-27	Method for establishing a table of correction values and sensor signal and a sensor module
	2005-04-28	Electronic sensor with signal conditioning
	2006-08-08	Method for continuous sensor self-test
	2008-11-27	Position Detecting Device And Position Detecting Method
	2002-12-05	Method and device for determining the absolute angle of rotation of an object that is rotating about an approximately horizontal rotational axis
	1999-11-01	Movement detecting device
	2006-04-19	Process and safety system for detecting a roll-over and for enabling a safety device in a motor vehicle
	1994-03-23	Haiburitsudo type position measuring device
	1997-09-18	Method and arrangement for detecting a vehicle roll-over
	2004-07-29	Method of correcting rotational positional error of robot cleaner

1988-11-15	Apparatus for automatic release of passenger protection devices in the event of an accident
1999-08-10	Navigation apparatus for a vehicle

Priority And Related Applications

Priority Applications (1)

Application	Priority date	Filing date	Title
	1995-03-23	1995-03-23	Method for canceling offset in measurement with gyro

Applications Claiming Priority (1)

Application	Filing date	Title
	1995-03-23	Method for canceling offset in measurement with gyro

Legal Events

Date	Code	Title	Description
2002-08-13	A02	Decision of refusal	**Free format text**: JAPANESE INTERMEDIATE CODE: A02 **Effective date**: 20020813

Concepts

machine-extracted

Filter table

Name	Image	Sections	Count	Query match
controlling effects		abstract	1	0

Data provided by IFI CLAIMS Patent Services

Electronic Patent Application Fee Transmittal					
Application Number:	16166518				
Filing Date:	22-Oct-2018				
Title of Invention:	Networked Playback Device				
First Named Inventor/Applicant Name:	Nicholas A.J. Millington				
Filer:	Brandon Jacob Kennedy/Jaden Knosher				
Attorney Docket Number:	11-0403-CON1018 (15-1433)				
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:	39691135
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-JUN-2020
Filing Date:	22-OCT-2018
Time Stamp:	22:52:20
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	E20206AM53409691
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	83952 fa19cecb58dd8e6c6089e228e547e64824a87684	no	1
Warnings:					
Information:					
2	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_0_IDS_20200610144926.pdf	1055179 5a6ac6d9abec2aed0c9c013c3ab09d62c8f903c1	no	6
Warnings:					
Information:					
3	Non Patent Literature	16166518_NFOA_11-0403-CON1018_10-16-19_13pages.pdf	418503 ce8cdb350e9964a4a2d5251ef7a4e2d938ab1a32	no	13
Warnings:					
Information:					
4	Non Patent Literature	201610817558_CN_2nd_OA_11-0403-CN-DIV_12-13-19_9pages.pdf	864152 b1b908966f0a17ab0a63ff22f026972daebeac6b	no	9
Warnings:					
Information:					
5	Non Patent Literature	AudioPoint_Weclome_to_the_coolest_2002_2pages.pdf	919776 f83d66c1599812dfec617aecbfd40233cbf0f23f	no	2
Warnings:					
Information:					
6	Non Patent Literature	AudioPoint_from_Home_Director_2002_2pages.pdf	829454 919cce38407e2bfb78fc9bf07a6190b1dcd5a21b	no	2
Warnings:					
Information:					

7	Non Patent Literature	Barix_Exstreamer_Software_4-6-03_2pages.pdf	1055944 9fc4e4adcb813783dbf93b55cde5a3ac06fb225e	no	2
Warnings:					
Information:					
8	Non Patent Literature	Exstreamer_Instruction_Manual_2020_21pages.pdf	12952288 decd20d8716dda6dfb4470ad14867ee4afdc6fee	no	21
Warnings:					
Information:					
9	Non Patent Literature	Exstreamer_Network_MP3_Player_2002_2pages.pdf	1287098 076611dc52f954cce8a0ccc45d6644cc8a21bdde	no	2
Warnings:					
Information:					
10	Non Patent Literature	Barix_Exstreamer_Datasheet_2003_1page.pdf	651731 291eda1d1a026aa3923de01ff19b3105e438964a	no	1
Warnings:					
Information:					
11	Non Patent Literature	The_Exstreamer_Technical_Description_v1_5_2002_36pages.pdf	19481565 00f091fac0381807cdd3a369a96497094e7b03f0	no	36
Warnings:					
Information:					
12	Non Patent Literature	Yahoo_Groups_Exstreamer_2013_1page.pdf	590163 2d3ef07ede25d814d08e867e782ac54c0f6a6812	no	1
Warnings:					
Information:					
13	Non Patent Literature	Wireless_Home_Audio_Director_Linksys_by_Cisco_2008_2pages.pdf	1511437 5133340880c2d4bb204a15fc9f4be48ffd38ab71	no	2
Warnings:					
Information:					

14	Non Patent Literature	Crest_Audio_8001_v2_2_1997_2pages.pdf	1967594 00ebc0c9dba4c247ec7319d653fbdf625d5a27c9	no	2
Warnings:					
Information:					
15	Non Patent Literature	Fireball_E2_User_Manual_2000-2004_106pages.pdf	7633388 a4b248eb4aaf11579d42365fa10444 8e719210d3	no	106
Warnings:					
Information:					
16	Non Patent Literature	Fireball_Digital_Music_Manager_E-40_E-120_2pages.pdf	1815900 8760e9bea8c3d96edd64ccea8a2606ca8fee0856	no	2
Warnings:					
Information:					
17	Non Patent Literature	LA_Audio_ZX135E_6_Zone_3-26-20_6pages.pdf	2757483 92ebb187f1caaf7a9afeb76e946ddf7b9074974 3	no	6
Warnings:					
Information:					
18	Non Patent Literature	Niles_ZR-8630AV_Multi-Zone_Control_Systems_5pages.pdf	3449528 6ba6b41d2adfae7792b2112485b89fdc10a11aba	no	5
Warnings:					
Information:					
19	Non Patent Literature	Davies_Sony_Ericsson_MS500_3-17-09_2pages.pdf	1000725 d2b6cbe5211912 2210d46a147f9b972f99de98db	no	2
Warnings:					
Information:					
20	Non Patent Literature	DP-0206_TOA_Digital_Signal_Processor_2001_4pages.pdf	3193217 bf5143671eb9cc037d5e40ce933286692d4c039d	no	4
Warnings:					
Information:					

21	Non Patent Literature	TOA_Electronics_DP-0206_2001_12pages.pdf	3193211 cfa7df31cd212e6ccf5b072c50266f8a2e92a4fc	no	4
Warnings:					
Information:					
22	Non Patent Literature	UPNP_Device_Architecure_1_2008_80pages.pdf	13619774 1758bef61234ab582f00d0671225a8c1d5e12010	no	80
Warnings:					
Information:					
23	Non Patent Literature	UPNP_AV_Architecture_83_2002_22pages.pdf	2630265 3f768538c102bc23eead6baf1124c667fe48d54e	no	22
Warnings:					
Information:					
24	Non Patent Literature	Model_MRC88_Eight_Zone_2003_102pages.pdf	24877021 f21a5bf29af2966009e88a4fd35d620b7ffa59e7	no	102
Warnings:					
Information:					
25	Non Patent Literature	Yamaha_DME_3_Owners_Manual_501pages_Part1.pdf	23079753 cccf7941aaf4533273a810bcc93743bb1875522b	no	375
Warnings:					
Information:					
26	Non Patent Literature	Yamaha_DME_3_Owners_Manual_501pages_Part2.pdf	16744757 a68daec6fb8709e1cf397afde8b10229a398eb10	no	126
Warnings:					
Information:					
27	Non Patent Literature	Denon_AVR-3805_A-V_Surround_2pages.pdf	2104372 f8f35eef017c530ffb247eecbaa069f33fa77b1f	no	2
Warnings:					
Information:					

28	Non Patent Literature	Structured_Media_Components_Leviton_28pages.pdf	5330587 5145063385c5449824423 4ef2e3986eb9ebad13f	no	28
Warnings:					
Information:					
29	Foreign Reference	JPH08261761A.pdf	233717 eda45dc900d0c019787a81334c5c79a165abca89	no	5
Warnings:					
Information:					
30	Fee Worksheet (SB06)	fee-info.pdf	30530 581368f9e1c5332cb6100f5f5881d25851f5c2c5	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	155363064		

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. 11-0403-CON1018)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2654**
Serial No.: 16/166,518	)	
	)	
Filed: October 22, 2018	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7844	)	
	)	
For: Networked Playback Device	)	

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: June 10, 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
Sonos No.: 11-0403-CON1018
(MBHB No. 15-1433-US-CON4)

In the Application of:	)	
	)	
Millington	)	Art Unit: 2656
	)	
Serial No.: 16/166,518	)	Examiner: McCord
	)	
Filed: October 22, 2018	)	Confirmation No. 7844
	)	
For: Networked Playback Device	)	
	)	

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

RESPONSE TO NON-FINAL OFFICE ACTION
MAILED OCTOBER 16, 2019

Please consider the following Amendments and Remarks in response to the Non-Final Office Action mailed on October 16, 2019 in the above-captioned application.

A listing of **PENDING CLAIMS** begins on page 2.

REMARKS begin on page 7.

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.

McDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE
CHICAGO, ILLINOIS 60606
TELEPHONE (312) 913-0001

PENDING CLAIMS

1. (Original) A playback device comprising:

one or more processors; and

tangible, non-transitory computer readable memory comprising instructions stored therein, wherein the instructions, when executed, cause the playback device to perform a method comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

2. (Original) The playback device of claim 1, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.

3. (Original) The playback device of claim 1, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

4. (Original) The playback device of claim 1, wherein playing the second type of media content comprises playing the second type of media content in synchrony with a second playback device.

5. (Original) The playback device of claim 1, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

6. (Original) The playback device of claim 1, wherein playing the second type of media content comprises transmitting at least a portion of the second type of media content to a third playback device.

7. (Original) The playback device of claim 1, wherein playing the first type of media content comprises transmitting at least a portion of the first type of media content to at least one of a second playback device or a third playback device.

8. (Original) The playback device of claim 1, wherein the first type of media content comprises media content received from a video device.

9. (Original) Tangible, non-transitory computer-readable media comprising instructions encoded therein, wherein the instructions, when executed by a playback device, cause the playback device to perform functions comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content; determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

10. (Original) The tangible, non-transitory computer-readable media of claim 9, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.

11. (Original) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

12. (Original) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

13. (Original) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises transmitting at least a portion of the second type of media content to a third playback device.

14. (Original) The tangible, non-transitory computer-readable media of claim 9, wherein playing the first type of media content comprises transmitting at least a portion of the first type of media content to at least one of a second playback device or a third playback device.

15. (Original) The tangible, non-transitory computer-readable media of claim 9, playback device of claim 1, wherein the first type of media content comprises media content received from a video device.

16. (Original) A method performed by a playback device, the method comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content; after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

17. (Original) The method of claim 16, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.

18. (Original) The method of claim 16, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

19. (Original) The method of claim 16, wherein playing the second type of media content comprises playing the second type of media content in synchrony with a second playback device.

20. (Original) The method of claim 16, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

REMARKS

I. Summary of the Claims

Claims 1-20 are pending; claims 1, 9, and 16 are independent. Applicant has not amended the claims in the present Response.

II. Summary of the Office Action

In the Office Action, the Office: (i) rejected claims 1, 9, and 16 under 35 U.S.C. § 101 for statutory double patenting based on claim 1 of U.S. Pat. 8,938,312; and (ii) rejected claims 1-20 under 35 U.S.C. § 103 based on U.S. Pub. 2004/0239816 (Ando), U.S. Pat. 7,571,014 (Lambourne), and U.S. Pub. 2006/0029005 (Slemmer).

III. Response to the Double Patenting Rejections

Applicant requests that the double patenting rejections be held in abeyance until the present claims are deemed allowable.

IV. Response to the § 103 Rejections

The claims are patentable over the combination of Ando, Lambourne, and Slemmer for at least the reason that the combination of Ando, Lambourne, and Slemmer fails to teach or suggest all the elements recited in the claims. For example, with reference to independent claim 1, the combination of Ando, Lambourne, and Slemmer fails to teach or suggest at least "in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content" in combination with the other elements recited in the claims.

The Office Action states the combination of Ando and Lambourne "does not explicitly teach configuring a plurality of playback devices in response to determining the presence or absence of signals at an input and reconfiguring or re-arming of the system to respond again to a signal at the line input after an instruction is received to stop playback and in response to the determination that a signal is no longer present at the line input." Office Action, p. 7. The Office Action cites Slemmer to overcome the stated deficiencies of Ando and Lambourne. Office Action, p. 7 (citing Slemmer, Figs. 8-9, ¶¶ 65-71).

However, the cited portions of Slemmer describe "particular methods of learning," including "logical operations where [a] device whose state changes later in time learns [an] interaction rule" and a "method of learning where the first device to have a change of state learns the interaction rule." Slemmer, ¶¶ 64-71; Figs 8-9. Slemmer's disclosed learning methods do not amount to the specific feature of "in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content," as recited in claim 1.

In view of the foregoing, independent claim 1 is patentable over Ando, Lambourne, and Slemmer for at least the reason that the Ando-Lambourne-Slemmer combination fails to teach or suggest at least "in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content" in combination with the other elements recited in the claims. And because independent claims 9 and 16 recite similar elements, independent claims 9 and 16 are also patentable over Ando, Lambourne, and Slemmer for reasons similar to those articulated

for independent claim 1. Further, and without conceding the merits of the other assertions in the Office Action, the pending dependent claims are patentable over Ando, Lambourne, and Slemmer for at least the reason that they depend from patentable independent claims.

V. Conclusions

Applicant submits that the claims are patentable over the cited references 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: April 16, 2020

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

Electronic Patent Application Fee Transmittal				
Application Number:	16166518			
Filing Date:	22-Oct-2018			
Title of Invention:	Networked Playback Device			
First Named Inventor/Applicant Name:	Nicholas A.J. Millington			
Filer:	Jeffrey Armstrong			
Attorney Docket Number:	11-0403-CON1018 (15-1433)			
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($)
Extension - 3 months with $0 paid	1253	1	1400	1400
Miscellaneous:				
		Total in USD ($)		**1400**

Electronic Acknowledgement Receipt	
EFS ID:	39183061
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	16-APR-2020
Filing Date:	22-OCT-2018
Time Stamp:	22:46:50
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1400
RAM confirmation Number	E20204FM47178655
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	Extension of Time	11-0403-CON1018_EOT.pdf	139127 282cdd7d0417af325b39c7e0bba61657ff8b7032	no	1
Warnings:					
Information:					
2		11-0403-CON1018_Response.pdf	93426 d796c032a6ce4b0e24bc94e7635c0291abb76906	yes	9

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Claims	2	6
	Applicant Arguments/Remarks Made in an Amendment	7	9

Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30474 1c1d9443f9dd16d32c28f8d73224a45686dc0362	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	263027		

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.

PTO/SB/22 (03-13)
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 displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)

Docket Number (Optional): 11-0403-CON1018

Application Number	Filed
16/166,518	October 22, 2018

For: Networked Playback Device

Art Unit	Examiner
2656	McCord

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

		Fee	Small Entity Fee	Micro Entity Fee	
☐	One month (37 CFR 1.17(a)(1))	$200	$100	$50	$
☐	Two months (37 CFR 1.17(a)(2))	$600	$300	$150	$
☑	Three months (37 CFR 1.17(a)(3))	$1,400	$700	$350	$ 1,400.00
☐	Four months (37 CFR 1.17(a)(4))	$2,200	$1,100	$550	$
☐	Five months (37 CFR 1.17(a)(5))	$3,000	$1,500	$750	$

☐ Applicant asserts small entity status. See 37 CFR 1.27.

☐ Applicant certifies micro entity status. See 37 CFR 1.29.
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☑ The Director has already been authorized to charge fees in this application to a Deposit Account.

☑ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 13-2490.

☑ Payment made via EFS-Web.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. 37 CFR 3.73(b) statement is enclosed (Form PTO/SB/96).

☑ attorney or agent of record. Registration number 54,967.

☐ attorney or agent acting under 37 CFR 1.34. Registration number .

/Jeffrey P. Armstrong/	April 16, 2020
Signature	Date
Jeffrey P. Armstrong	312-913-0001
Typed or printed name	Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.

☑ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). 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 6 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.

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
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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 16/166,518	Filing Date 10/22/2018	☐ 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	04/16/2020	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".	/TRINA RIDDICK/
*** 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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	TBD
Attorney Docket Number	11-0403-CON1018

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	5642171		1997-06-24	BAUMGARTNER; Donn M. et al.	
	2	6119239		2000-09-12	FUJII; Kazuo	
	3	6122749		2000-09-19	GULICK; Dale A.	
	4	6703940		2004-03-09	ALLEN; William A. et al.	
	5	7269338		2007-09-11	JANEVSKI; Angel	
	6	7313384		2007-12-25	MEENAN; Patrick et al.	
	7	8601394		2013-12-03	SHEEHAN; Conor et al.	
	8	8688431		2014-04-01	LYONS; Kenneth S. et al.	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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	20050235334		2005-10-20	TOGASHI; Ryuichiro et al.	
	2	20060083388		2006-04-20	ROTHSCHILD; Leigh M.	
	3	20070053514		2007-03-08	IMAI; Shigeru et al.	
	4	20070220150		2007-09-20	GARG; Gopal K.	
	5	20080109852		2008-05-08	KRETZ; Martin H. et al.	
	6	20090006968		2009-01-01	TRASK; Keoki et al.	
	7	20100332565		2010-12-30	AL-SHAYKH OSAMA . et al.	
	8	20110301728		2011-12-08	HAMILTON; Robert et al.	
	9	20120304233		2012-11-29	ROBERTS; Brian F. et al.	

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

FOREIGN PATENT DOCUMENTS Remove

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2] ¡	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	101053152	CN	A	2007-10-10	HARMAN INT IND [US]		☒
	2	101127987	CN	A	2008-02-20	XEROX CORP [US]		☒
	3	101212827	CN	A	2008-07-02	LG ELECTRONICS CO LTD SHANGHAI [CN]		☒
	4	101320292	CN	A	2008-12-10	LIE LIN [CN]		☒
	5	101501775	CN	A	2009-08-05	MICROSOFT CORP [US]		☒
	6	1669240	CN	A	2005-09-14	SONY ERICSSON MOBILE COMM AB [SE]		☒
	7	2978240	EP	A1	2016-01-27	SONOS INC [US]		☐
	8	2005136457	JP	A	2005-05-26	SANYO ELECTRIC CO.		☒
	9	9709756	WO	A2	1997-03-13	BUCALO BRIAN D [US], et al.		☐

If you wish to add additional Foreign Patent Document citation information please click the Add button Add

NON-PATENT LITERATURE DOCUMENTS Remove

EFS Web 2.1.18

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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	CHINESE PATENT OFFICE, First Office Action and Translation mailed on 12 March 2019, issued in connection with Chinese Application No. 201610817558.8, 17 pages.	
	2	CHINESE PATENT OFFICE, First Office Action mailed on 22 February 2019, issued in connection with Chinese Application No. 201710076046.5, 15 pages.	☒
	3	CHINESE PATENT OFFICE, Second Office Action and Translation mailed on 4 November 2019, issued in connection with Chinese Application No. 201710076046.5, 18 pages.	☐
	4	JAPANESE PATENT OFFICE, Office Action mailed on 29 October 2019, issued in connection with Japanese Patent Application No. 2019-001932, 6 pages.	☒
	5	Sonos, Inc. v. Implicit, LLC: Declaration of Roman Chertov in Support of the Inter Partes Review of U.S. Patent No. 7,391,791 dated March 9, 2018, 92 pages.	☐
	6	Sonos, Inc. v. Implicit, LLC: Declaration of Roman Chertov in Support of the Inter Partes Review of U.S. Patent No. 8,942,252 dated March 9, 2018, 81 pages.	☐
	7	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit A, filed October 14, 2019, 3 pages.	☐
	8	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit C, filed October 14, 2019, 16 pages.	☐
	9	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit D, filed October 14, 2019, 36 pages.	☐
	10	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint - Exhibit E, filed October 14, 2019, 21 pages.	☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

	11	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' Answer to Plaintiff's Complaint, filed October 14, 2019, 66 pages.	☐
	12	Sonos, Inc. v. Lenbrook Industries Limited et al., Defendants' First Amended Answer and Counterclaims to Plaintiff's Complaint, filed November 14, 2019, 66 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	TBD
	Attorney Docket Number	11-0403-CON1018

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)	2019-11-25
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.**

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.

Espacenet

Bibliographic data: CN1669240 (A) — 2005-09-14

Portable audio playback device with bass enhancement

Inventor(s): RICHARD MOORE [SE] ± (MOORE RICHARD)

Applicant(s): SONY ERICSSON MOBILE COMM AB [SE] ± (SONY ERICSSON MOBILE COMM AB)

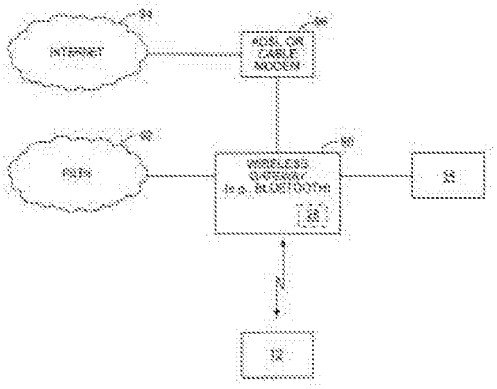
Classification: **- international:** ***H04R5/02;*** (IPC1-7): H04B5/00
- cooperative: **H04R3/14;** H04R2420/07; H04R5/04; H04S2400/07

Application number: CN2003817156 20030714

Priority number(s): US20020199453 20020719

Also published as: AT491266 (T) AU2003249110 (A1) AU2003249110 (A8) CN100592653 (C) EP1532749 (A2) more

Abstract of CN100592653 (C)



Wirelessly linking a portable audio device to an external audio system permits the external audio system to generate audible signals that enhance local playback of audio by the portable device. For example, the portable device wirelessly transmits lower frequency components of an audio signal to a subwoofer system for reproduction of bass frequencies extending below the playback capability of theportable device. In this manner, the external audio system provides bass enhancement for the portable audio device. Wireless transmissions between the portable audio device and the external audio system may be, but are not limited to, optical or radio frequency (RF) transmissions. Where RF signaling is used, the wireless link may be based on wireless network links, such as those supported by Bluetooth and 802.11b standards, or based on, for example, dedicated RF interfaces.

[19] 中华人民共和国国家知识产权局

[51] Int. Cl[7]
H04B 5/00

[12] 发明专利申请公开说明书

[21] 申请号 03817156.2

[43] 公开日 2005 年 9 月 14 日

[11] 公开号 CN 1669240A

[22] 申请日 2003.7.14 [21] 申请号 03817156.2
[30] 优先权
[32] 2002. 7.19 [33] US [31] 10/199,453
[86] 国际申请 PCT/IB2003/002793 2003.7.14
[87] 国际公布 WO2004/010729 英 2004.1.29
[85] 进入国家阶段日期 2005.1.18
[71] 申请人 索尼爱立信移动通讯股份有限公司
地址 瑞典隆德
[72] 发明人 R·穆尔

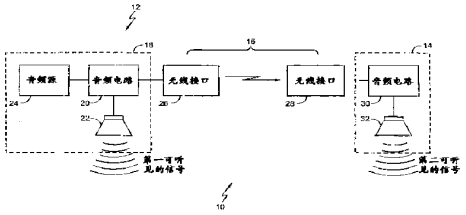
[74] 专利代理机构 中国专利代理(香港)有限公司
代理人 程天正 张志醒

权利要求书 7 页 说明书 11 页 附图 5 页

[54] 发明名称 具有低音增强的便携式音频回放设备

[57] 摘要

把便携式音频设备无线链接到外部音频系统允许该外部音频系统产生由所述便携式设备增强音频的本地回放的可听见的信号。 例如，便携式设备无线地发送音频信号的低频分量到重低音喇叭系统用于再生在该便携式设备的回放能力之下伸展的低音频率。 以这种方式，外部音频系统为便携式音频设备提供低音增强。 在该便携式音频设备和外部音频系统之间的无线传输可以是，但不限于，光的或者射频(RF)传输。 在使用 RF 信令的情况下，无线链路可以是基于无线网络链路，例如蓝牙和 802.11b 标准支持的那些，或者基于例如专用 RF 接口。



ISSN1008-4274

知识产权出版社出版

LINKPLAY EXHIBIT 1002
Page 178 of 1292

1.一种便携式音频设备，包括：

包括用于产生音频信号的音频电路以及至少一个被耦合到所述音频电路的扬声器的便携式音频回放单元，所述扬声器响应于该音频信号来产生第一可听见的信号；以及

被耦合到所述音频电路的无线接口，以发送从所述音频信号得到的增强信号给产生增强所述第一可听见信号的第二可听见信号的外部音频系统。

2.如权利要求1所述的便携式音频设备，其中所述音频电路包括至少一个延迟匹配单元来匹配所述第一和第二可听见的信号的延迟，以便于所述第一和第二可听见的信号在时间上对齐。

3.如权利要求2所述的便携式音频设备，其中所述延迟匹配单元延迟所述第一可听见的信号来匹配于跟所述增强信号到所述外部音频系统的传输相关的链路延迟。

4.如权利要求2所述的便携式音频设备，其中所述延迟匹配单元延迟所述第一可听见的信号来匹配于跟来自所述音频系统的第二可听见的信号的输出相关的可听见的信号延迟。

5.如权利要求3所述的便携式音频系统，其中所述第一可听见的信号的延迟是持续的，以便于用于所述第一可听见的信号的增强的增强信号的传输能够有选择地被使能和禁止而不会产生可听见的中断。

6.如权利要求1所述的便携式音频设备，其中所述音频电路包括第一滤波器来通过滤波所述音频信号而产生所述增强信号。

7.如权利要求6所述的便携式音频设备，其中所述第一滤波器是低通滤波器并且所述增强信号包括所述音频信号的低频分量。

8.如权利要求6所述的便携式设备，其中所述音频电路还包括第二滤波器来滤波所述音频信号以产生所述第一可听见的信号。

9.如权利要求8所述的便携式音频设备，其中所述第一和第二滤波器形成交叠滤波器。

10.如权利要求8所述便携式音频设备，其中所述第一滤波器是低通滤波器并且其中所述第二滤波器是高通滤波器。

11.如权利要求1所述的便携式音频设备，其中所述音频信号是多通道音频信号并且其中所述音频回放单元包括至少两个扬声器，每一个

LINKPLAY EXHIBIT 1002
Page 179 of 1292

输出所述多通道音频信号的各个通道。

12. 如权利要求 11 所述的便携式音频设备，其中所述音频电路还包括求和器来通过合并所述音频信号的两个或者多个通道而产生所述增强信号。

13. 如权利要求 1 所述的便携式音频设备，其中所述音频回放单元还包括控制所述音频回放单元的控制单元。

14. 如权利要求 13 所述的便携式音频设备，其中所述控制单元经由所述无线接口而发送控制信号到所述外部音频系统来控制所述外部音频系统。

15. 如权利要求 13 所述的便携式音频设备，其中所述控制单元发送音量控制信号到所述外部音频系统来控制所述第二可听见的信号的音量。

16. 如权利要求 1 所述的便携式音频设备，其中所述无线接口包括支持经由数字无线网络链路的通信的数字无线连网接口。

17. 如权利要求 16 所述的便携式音频设备，其中所述数字无线网络链路包括低数据速率通道并且其中所述增强信号在该低数据速率通道上被所述便携式音频设备发送到所述外部音频系统。

18. 如权利要求 17 所述的便携式音频设备，其中所述低数据速率通道是无监督通道。

19. 如权利要求 17 所述的便携式音频设备，其中所述无线连网接口是蓝牙接口并且其中所述低数据速率音频通道是 CVSD 话音通道。

20. 如权利要求 17 所述的便携式音频设备，其中所述低数据速率通道是被所述音频回放单元与用于进行话音呼叫的电话应用在时间上共享的。

21. 如权利要求 20 所述的便携式音频设备，包括回放模式，在该模式期间，所述增强信号在所述低数据速率通道上被发送给所述外部音频系统，以及话音模式，在该模式期间，所述增强信号的传输被中止并且所述低数据速率通道被用于支持话音呼叫。

22. 如权利要求 17 所述的便携式音频设备，其中所述无线网络链路还包括高数据速率通道。

23. 如权利要求 22 所述的便携式音频设备，其中所述音频信号是从在所述高数据速率通道上通过无线接口接收到的信息得出的。

LINKPLAY EXHIBIT 1002
Page 180 of 1292

24. 如权利要求 1 所述便携式音频设备，其中所述无线接口支持特设连网以便于所述便携式音频设备检测所述外部音频系统用于回放增强的可用性。

25. 如权利要求 24 所述的便携式音频设备，其中当所述外部音频系统可用于回放增强时所述便携式音频设备自动地发送所述增强信号。

26. 如权利要求 24 所述的便携式音频设备，其中当所述外部音频系统可用于回放增强时，所述便携式音频设备通知所述便携式音频设备的用户。

27. 一种音频系统，包括:

包括第一音频电路和至少一个扬声器以响应于音频信号而输出第一可听见的信号的便携式音频设备;

包括第二音频电路以及低音喇叭以通过响应于所述音频信号的低频分量而产生第二可听见信号来增强所述第一可听见信号的外部音频系统; 以及

无线链路，用以从所述便携式音频设备发送所述音频信号的低频分量到所述外部音频系统。

28. 如权利要求 27 所述的音频系统，其中所述第一音频电路包括至少一个延迟匹配单元以匹配所述第一和第二可听见的信号的延迟以便于所述第一和第二可听见的信号在时间上对齐。

29. 如权利要求 28 所述的音频系统，其中所述至少一个延迟匹配单元延迟所述第一可听见的信号以匹配于跟所述音频信号的低频分量到所述外部音频系统的传输相关的链路延迟。

30. 如权利要求 29 所述的便携式音频系统，其中所述第一可听见的信号的延迟是持续的，以便于所述音频信号的低频分量的传输可以被有选择地使能及禁止而不会产生可听见的中断。

31. 如权利要求 27 所述的音频系统，其中所述第一音频电路包括第一滤波器，用于滤波所述第一音频信号以获得所述音频信号的低频分量

32. 如权利要求 31 所述的音频系统，其中所述第一滤波器是低通滤波器以输出包括所述音频信号的低频分量的增强信号。

33. 如权利要求 31 所述的便携式设备，其中所述第一音频电路还包括第二滤波器来滤波所述音频信号以产生所述第一可听见的信号。

34. 如权利要求 33 所述的音频系统，其中所述第一和第二滤波器形

LINKPLAY EXHIBIT 1002
Page 181 of 1292

成交叠滤波器。

35. 如权利要求 33 所述的音频系统，其中所述第一滤波器是低通滤波器并且其中所述第二滤波器是高通滤波器。

36. 如权利要求 27 所述的音频系统，其中所述音频信号是多通道的音频信号并且其中所述便携式音频设备包括至少两个扬声器，每个输出所述多通道音频信号的各个通道。

37. 如权利要求 36 所述的音频系统，其中所述第一音频电路还包括求和器以通过合并所述多通道音频信号的两个或更多个通道来获得该多通道音频信号的低频分量。

38. 如权利要求 27 所述的音频系统，其中所述便携式音频设备还包括控制所述音频回放单元的控制单元。

39. 如权利要求 38 所述的音频系统，其中所述控制单元经由所述无线接口发送控制信号到所述外部音频系统以控制所述外部音频系统。

40. 如权利要求 38 所述的音频系统，其中所述控制单元发送音量控制信号到所述外部音频系统以控制所述第二可听见的信号的音量。

41. 如权利要求 27 所述的音频系统，其中所述无线接口包括支持经由数字无线网络链路的通信的数字无线连网接口。

42. 如权利要求 41 所述的音频系统，其中所述数字无线网络链路包括低数据速率通道并且其中所述音频信号的低频分量作为增强信号在所述低数据速率通道上被所述便携式音频设备发送到所述外部音频系统。

43. 如权利要求 42 所述的音频系统，其中所述低数据速率通道是无监督通道。

44. 如权利要求 42 所述的音频系统，其中所述无线连网接口是蓝牙接口并且其中所述低数据速率通道是 CVSD 话音通道。

45. 如权利要求 42 所述的音频系统，其中所述便携式音频设备跟用于进行话音呼叫的电话应用在时间上共享所述低数据速率通道。

46. 如权利要求 45 所述的音频系统，包括回放模式，在该模式期间所述增强信号在所述低数据速率通道上被发送到所述外部音频系统，以及话音模式，在该模式期间所述增强信号的传输被中止并且所述低数据速率通道被用于支持话音呼叫。

47. 如权利要求 42 所述的音频系统，其中所述无线网络链路还包括

LINKPLAY EXHIBIT 1002
Page 182 of 1292

高数据速率通道。

48. 如权利要求 47 所述的音频系统，其中所述音频信号是从在所述高数据速率通道上通过无线接口接收到的信息得出的。

49. 如权利要求 27 所述的音频系统，其中所述无线接口支持特设连网以便于所述便携式音频设备检测所述外部音频系统用于回放增强的可用性。

50. 如权利要求 49 所述的音频系统，其中当所述外部音频系统可用于回放增强时，所述便携式音频设备自动地发送包括所述音频信号的低频分量的增强信号。

51. 如权利要求 49 所述的音频系统，其中当所述外部音频系统可用于回放增强时，所述便携式音频设备通知所述便携式音频设备的用户。

52. 一种增强便携式音频设备的音频回放的方法，该方法包括:

响应于音频信号而从所述便携式音频设备输出第一可听见的信号；以及

从所述便携式音频设备发送包含所述音频信号的低频分量的增强信号到提供低音增强的外部音频系统。

53. 如权利要求 52 所述的方法，还包括响应于所述增强信号，从所述外部音频系统输出第二可听见的信号，其中所述第二可听见的信号为所述第一可听见的信号提供低音增强。

54. 如权利要求 52 所述的方法，还包括匹配所述第一和第二可听见的信号的延迟。

55. 如权利要求 54 所述的方法，其中匹配所述第一和第二可听见的信号的延迟包括延迟从所述便携式音频设备输出的所述第一可听见的信号以匹配于跟所述增强信号到所述外部音频系统的传输相关的链路延迟。

56. 如权利要求 55 所述的方法，还包括在没有增强信号被发送的时段期间延迟所述第一可听见的信号。

57. 如权利要求 52 所述的方法，还包括在第一滤波器中滤波所述音频信号以产生所述增强信号。

58. 如权利要求 57 所述的方法，其中所述第一滤波器是去除所述音频信号的高频分量以产生所述增强信号的低通滤波器。

59. 如权利要求 57 所述的方法，还包括在第二滤波器中滤波所述

LINKPLAY EXHIBIT 1002
Page 183 of 1292

音频信号以产生所述第一可听见的信号。

60. 如权利要求 59 所述的方法，其中所述第一和第二滤波器形成交叠滤波器。

61. 如权利要求 60 所述的方法，其中所述第一滤波器是低通滤波器并且所述第二滤波器是高通滤波器。

62. 如权利要求 52 所述的方法，其中所述音频信号是多通道音频信号并且其中所述第一可听见的信号是由两个或更多个扬声器产生的。

63. 如权利要求 62 所述的方法，还包括合并所述多通道音频信号的两个或更多个通道以产生所述增强信号。

64. 如权利要求 52 所述的方法，还包括从所述便携式音频设备发送控制信号到所述外部音频系统以控制所述外部音频系统的运行。

65. 如权利要求 64 所述的方法，其中控制所述外部音频系统的运行包括从所述便携式音频设备发送音量控制信号到所述外部音频系统以控制所述第二可听见的信号的音量。

66. 如权利要求 52 所述的方法，其中从所述便携式音频设备发送包含所述音频信号的低频分量的增强信号到外部音频系统包括在无线网络接口上发送所述增强信号。

67. 如权利要求 66 所述的方法，其中所述无线网络接口为数字无线网络链路提供支持。

68. 如权利要求 67 所述的方法，其中所述数字无线网络链路包括低数据速率通道并且其中所述音频增强信号是由所述便携式音频设备在所述低数据速率通道上发送到所述外部音频系统的。

69. 如权利要求 68 所述的方法，其中所述低数据速率通道是无监督通道。

70. 如权利要求 69 所述的方法，其中所述无线网络接口是蓝牙接口并且其中所述低数据速率音频通道是 CVSD 话音通道。

71. 如权利要求 68 所述的方法，其中所述低数据速率通道由所述便携式音频设备与用于进行话音呼叫的电话应用在时间上共享。

72. 如权利要求 71 所述的方法，还包括在话音呼叫期间中止所述增强信号的传输。

73. 如权利要求 68 所述的方法，其中所述无线网络链路还包括高

LINKPLAY EXHIBIT 1002
Page 184 of 1292

数据速率通道。

74. 如权利要求 73 所述的方法，还包括在所述高数据速率通道上接收音频内容，其中所述音频信号是从在所述高数据速率通道上接收到的音频内容得出的。

75. 如权利要求 52 所述的方法，还包括检测所述外部音频系统用于回放增强的可用性。

76. 如权利要求 75 所述的方法，还包括当所述外部音频系统可用于回放增强时自动地发送所述增强信号。

77. 如权利要求 75 所述的方法，还包括当所述外部音频系统可用于回放增强时通知所述便携式音频设备的用户。

LINKPLAY EXHIBIT 1002
Page 185 of 1292

具有低音增强的便携式音频回放设备

发明背景

本发明涉及便携式音频设备，并且更具体地，涉及能够与外部音频系统通信以提供增强的音频回放的便携式音频设备。

数字电子技术的进展已经导致便携式音频设备的迅速发展。特别地，诸如音频 CD 播放器、数字音频播放器、FM/AM 无线电接收机、电视机、以及 DVD 播放器的便携式音频设备，由于它们已经变得小巧、轻便、并且易于个人携带，因此在消费者中已经变得日益流行。大多数这样的设备包括小的内置扬声器或者提供在某些情况下提供相对较好的音频质量的附加的耳机。

然而，对于这种设备的扬声器的尺寸限制显著地限制了它们跨全部音频范围产生大的声压级的能力。更特别地，通常用在便携式音频设备中的、或者在打算附加到这种设备的音频耳机中的小扬声器完全不能产生大的低音输出。因此，音频回放常常缺乏可从使用全尺寸扬声器的音频系统得到的全部范围的声音。这样的全尺寸扬声器使用一个或多个相对较大的、通常被称为“低音喇叭”或者“重低音喇叭”的音频驱动器来产生音频信号的较低频分量。尽管不存在特定的频率截止，但低于 100Hz 并且向下伸展至 20Hz 或者更低的频率分量通常被看作音频信号的低音分量。在这些频率范围上，完全没有对物理上大的、高功率的音频驱动器的替代品，这些音频驱动器实际上不能被包括在便携式音频设备中。

发明概述

本发明提供了用于通过把便携式音频设备无线链接到提供扩展的音频输出能力的外部音频系统而增强来自便携式音频设备的音频回放的方法和装置。由于加在包括在便携式音频设备中的扬声器上的尺寸约束限制了它们的再生低频信号的能力，本发明的示范实施例使用外部音频系统来提供低音增强。在示范实施例中，便携式音频设备响应于音频信号而产生第一可听见的信号、并且发送音频信号的低频分量到外部音频系统，该音频系统响应于由该便携式设备播放的音频信号的低频分量而产生第二可听见的信号。

LINKPLAY EXHIBIT 1002
Page 186 of 1292

从便携式设备到外部音频系统的低频音频信息的传输可以被看作是发送“增强信号”。通常，便携式设备处理音频信号以便于第一可听见的信号的产生与在外部音频系统中的第二可听见的信号的产生在时间上对齐。也就是说，便携式设备延迟本地回放以考虑与经由无线链路发送增强信号到外部音频系统有关的任何链路延迟，从而确保第二可听见的信号中的低音增强相对第一可听见的信号被正确地定时。

在示范实施例中，无线链路包括至少一个适于发送增强信号信息的数据信道。在优选的实施例中，增强信号经由适合于增强信号的低频信息内容的相对较低的数据速率通道被发送。无线链路可能包括多个通道以便于增强信号可以在继续执行其它通信功能的同时被发送。

作为实例，该便携式音频设备可以在无线链路的高数据速率通道上接收流播的音频内容，并且发送相关的增强信号用于在无线链路的第二、较低的数据速率通道上的流播音频的回放增强。此外，便携式音频设备可以跟其它应用或者设备功能进行第二通道的时间共享，例如其中便携式音频设备包含具有音乐回放功能的蜂窝电话或者膝上型电脑。

在示范的时间共享情形中，除了它的回放增强功能以外，便携式音频设备还支持电话应用或者其它通信应用。当它的通信应用不活动时，便携式音频设备使用无线链路来发送增强信号。一旦通信应用变成活动的，那么这样的传输就被中止或者被暂停，并且用于载送增强信号的无线链路通道然后被用于通信功能。作为这种时间共享功能的一部分，便携式音频设备可以基于通信功能的激活而自动地中止本地回放和增强信号传输。

附图简述

图 1 是用于音频回放增强的示范系统的框图。

图 2 是用于图 1 的便携式音频设备的示范细节的框图。

图 3 是用于图 1 的外部音频系统的示范细节的框图。

图 4 是在便携式设备上的示范音频信号处理的框图。

图 5 是使用无线连网的示范回放增强的框图。

发明详述

图 1 说明了根据本发明的示范音频回放系统。该音频回放系统总地由数字 10 所指，包括便携式音频设备 12 和在无线链路 16 上通信的外部音频系统 14。在运行中，便携式音频设备 12 提供本地音频回放，该

LINKPLAY EXHIBIT 1002
Page 187 of 1292

本地音频回放由在音频系统 14 上、响应于从设备 12 经由无线链路 16 被发送到音频系统 14 的回放增强信号的音频回放增强。也就是说，外部音频系统 14 产生响应于增强信号的可听见的输出来增强便携式音频设备 12 的可听见的输出。

在示范实施例中，便携式音频设备 12 包含一个包括音频电路 20、一个或多个扬声器 22 以及音频源 24 的音频回放单元 18、以及用于经由无线链路 16 通信的无线接口 26。第二无线接口 28 与音频系统 14 相关联或者包括在音频系统 14 中，其中该音频系统在示范实施例中包括音频电路 30 和一个或多个扬声器 32。

便携式音频设备 12 通过相关联的扬声器 22 输出第一可听见的信号。扬声器 22 典型地是被连接到便携式音频设备 12 的已装载（on-board）的扬声器或者头戴式扬声器。在另一种情况下，扬声器 22 通常在物理上较小并且缺乏全尺寸扬声器的频率范围。相反，外部音频系统 14 典型地包括具有比便携式音频设备的扬声器 22 更低的频率范围的较大的扬声器 32。更特别地，外部音频系统 14 将典型地包括低音喇叭和/或重低音喇叭用于再生音频信号的低频分量。

这样，在示范的回放增强运行中，便携式音频设备 12 响应于音频信号而产生第一可听见的信号，并且发送至少该音频信号的低频分量到外部音频系统 14，以便于它通过扬声器 32 输出第二可听见的信号。这里，所述第二可听见的信号包括至少被便携式音频设备 12 回放的音频信号的低频分量，并且因此为便携式音频设备回放提供低音增强。

正如已经指出的，在便携式设备 12 的低音响应由于它包括的扬声器 22 的必需的小尺寸而受到限制时，这样的低音增强尤其有意义。在增强信号中包括感兴趣的音频信号的低频分量便允许音频系统 14 通过再生音频信号的低频分量来增强音频信号的回放。因此，外部音频系统 14 在本文中用作便携式音频设备 12 的远程重低音喇叭。

图 2 说明了用于便携式音频设备 12 的示范细节。便携式音频设备 12 包括用于控制便携式音频设备 12 的运行的主控单元 40、用于存储控制程序以及便携式音频设备 12 在运行期间使用的数据的存储器 42、用于存储或提供由便携式音频设备 12 回放的音频内容的音频源 24、用户接口 44、无线接口 26、音频电路 20、以及扬声器 22。

音频源 24 可以包括任意类型的音频存储媒体，诸如压密盘（CD）、

LINKPLAY EXHIBIT 1002
Page 188 of 1292

数字录音带（DAT）、数字通用盘音频（DVD/音频）、或者是包含诸如MPEG 层 3（MP3）音频内容的音频内容的非易失性存储器。通常，音频内容可以以数字的或模拟的格式被存储。音频源 24 也可以包括适于接收包括音频内容的无线电信号的无线电接收机。这样，在至少某些实施例中，在无线接口 26 中的无线资源可以提供音频信息用于由设备 12 回放。

用户接口 44 为用户提供了用于控制便携式音频设备 12 的运行的装置。用户接口 44 可以包括显示器 46 和小键盘或者其它用户输入设备 48。小键盘或其它用户输入设备 48 使用户能够输入命令并选择选项。显示器 46 允许用户观看提示、菜单选项、或者关于设备 12 的运行的信息。

音频电路 20 从音频源 24 接受模拟或者数字格式的音频输入，并且提供基本的模拟音频输出给扬声器 22。要指出的是，音频电路 20 可以通过控制器 40 间接地接收音频内容，特别是在这样的内容是采用数字格式的情形中，或者可以从音频源 24 直接地得到这样的内容。音频电路 20 还提供增强信号、或者用于增强信号的产生的信息给无线接口 26，以便在无线链路 16 上传输到外部音频系统 14。

在本发明的上下文中，无线接口 26 被用于从便携式音频设备 12 经由无线链路 16 发送增强信号到音频系统 14。然而，正如在此稍后将详述的，在至少某些实施例中，无线接口 26 支持额外的功能。例如，无线接口 26 可被用来经由其相关联的无线接口 28 发送回放增强控制信息到音频系统 14。这样的控制信息可以包括，但不局限于，增益/音量控制、噪声抑制等等。此外，无线接口 26 可以包括收发机资源，以便于它能够接收例如音频内容用于由设备 12 回放，而同时发送增强信号给外部音频系统 14。

图 3 说明了用于外部音频系统 14 的示范细节。外部音频系统 14 可以，例如，包括音频电路 30 以及至少一个扬声器 32。音频电路 30 耦合到无线接口 28，该无线接口可以是在音频系统 14 的内部或者外部，以从便携式音频设备 12 接收增强信号。这样，无线接口 28 从便携式设备 12 接收增强信号并把该音频增强信号传递到音频电路 30 用于回放。

依靠实施细节，无线接口 28 可以响应于它经由无线链路 16 接收增强信号而产生线路电平（line-level）输出信号。这样的前置放大器类

LINKPLAY EXHIBIT 1002
Page 189 of 1292

型输出信号特别适合于音频电路 30 包括例如具有一个或多个与前置放大器电平信号相兼容的音频源输入的音频放大器或者立体声接收机的情况。本领域的技术人员将认识到输入增强信号信息到音频电路 30 中的多种可能性。不考虑信号格式，音频电路 30 响应于增强信号而产生扬声器电平输出信号，以便于扬声器 32 响应于来自便携式音频设备 12 的音频增强信号而用较高功率的音频信号所驱动。

音频电路 30 可能包括低通滤波器 50 和音频放大器 52。带通滤波器 50 有利地去除接收到的增强信号的高频分量和噪声。放大器 52 放大增强信号用于输出给扬声器 32。如早先指出的，相对于在便携式设备 12 中的扬声器 22，扬声器 32 可能包括重低音喇叭、或者一个或多个实际的物理尺寸的其它低音驱动器。当然，依靠音频系统 14 用于低音再生的一个另外的优点是：它更容易提供在低频上产生足够的声压级所需要的潜在的大功率电平。也就是说，便携式设备 12 典型地是电池供能的，因此具有有限的功率可用于音频回放。

在早先描述的运行细节中，已经指出便携式音频设备 12 响应于输入音频信号而产生第一可听见的信号并且在无线链路 16 上发送包含音频信号的低频分量的音频增强信号到外部音频系统 14。反过来，音频系统 14 例如通过再生音频信号的低频分量而产生增强该第一可听见信号的第二可听见的信号。然而，第二可听见的信号的产生涉及增强信号经由无线链路 16 传输，这典型地涉及一些链路延迟量。

在示范实施例中，便携式音频设备 12 包括延迟匹配功能，以便于在便携式音频设备 12 上的音频回放与在外部音频系统 14 上的增强回放在时间上对齐。这样，便携式音频设备 12 相对于音频信号引入了回放延迟用于第一可听见的信号，以便于它的第一可听见信号的本地产生被延迟一个量，该量匹配于与在外部音频系统 14 上的第二可听见信号的产生相关的相对延迟。更特别地，便携式音频设备 12 引入了一个相对的回放延迟，用于它的本地回放，以至少考虑与在无线链路 16 上的增强信号的传输相关的链路延迟。

图 4 更详细地说明了便携式音频设备 12 的音频电路 20。应当指出，图 4 说明了音频电路 20 的功能单元，并且不一定想要暗示这些单元的任何特定的物理安排。图示的功能可以被集成到一个公共的处理单元，例如数字信号处理器（DSP），以及，通常，可以在软件和硬件的混合

LINKPLAY EXHIBIT 1002
Page 190 of 1292

中实现。所使用的处理器类型可能依赖于便携式设备 12 的特性。

因此，音频控制器 60 可以是数字信号处理器（DSP）、或者执行支持回放和回放增强功能的所存储程序指令的微处理器或者微控制器、或者可以是一些其它形式的处理逻辑，例如复杂可编程逻辑器件（CPLD）、现场可编程门阵列（FPGA）、或者专用集成电路（ASIC）。除了音频处理之外，音频控制器 60 还可以实现其它功能。例如，便携式音频设备 12 可以包括既可用作音频电路 20 或者它的某些部分、又可用作主控单元 40 的单个处理器。

无论如何，示范音频电路 20 包括音频控制器 60、左通道电路 62、右通道电路 64、以及增强通道电路 66。音频控制器 60 从例如音频源 24 读取或者接收音频内容，并且输出音频信号。在公开的实施方案中，由音频控制器 60 输出的音频信号是一个立体声信号，其具有分别被馈送给音频电路 20 的左和右通道 62、64 的左（L）和右（R）信号分量。

左和右通道电路 62 及 64 每个包括高通滤波器 70、延迟单元 72、转换器 74、以及放大器 76。高通滤波器 70 去除通道的音频信号的低频分量，这可以提高扬声器 22 的音频性能。滤波后的音频信号馈入延迟单元 72，该延迟单元可能包括例如存储器来缓冲音频信号。滤波并延迟后的音频信号然后馈入转换器 74，该转换器把音频信号转换成模拟信号用于输出到各自的扬声器 22。要指出的是，数字－模拟转换器 74 在其中音频信号以模拟格式被处理的情况下通常是不需要的。模拟信号驱动放大器 76，该放大器输出适合于驱动相关联的扬声器 22 的一个响应的放大的输出信号。这样，扬声器 22 响应于由音频控制器 60 输出的音频信号而在便携式设备 12 上产生第一可听见的信号。

音频控制器 60 还输出音频信号到增强通道电路 66，该电路可以用作低频通道。增强通道电路 66 包括求和器 80、低通滤波器 82、并且可能包括数字－模拟转换器 84。求和器 80 合并由音频控制器 60 输出的左和右音频信号以形成组合信号用于输出到低通滤波器 82（假定立体声信号从音频控制器 60 被输出）。低通滤波器 82 去除组合音频信号的较高频分量。由低通滤波器 82 输出的组合音频信号，即，增强信号的低频分量然后可以被数字－模拟转换器 84 转换成模拟格式用于经由无线接口 26 传输到外部音频系统 14。如果组合的音频信号是以数字的而不是模拟的格式被发送到无线接口 26，则转换器 84 是不需要的。

LINKPLAY EXHIBIT 1002
Page 191 of 1292

在示范安排中，在低频通道中高通滤波器 70 的频率滚降（roll-off）点匹配于低通滤波器 82 的频率滚降点。由于这样的匹配，滤波器 70 和 82 如音频交叠滤波器（cross over filter）一样运行来保持便携式设备的扬声器 22 的较低频率截止匹配于被发送到外部音频系统 14 用于回放增强的频率。本领域的技术人员将意识到滤波/转换电路在其中音频信号是非立体声的，即，单通道格式的情况中被简化。因此，对于非立体声的信号，不需要求和器 80，并且可以省略音频电路 20 的左或右通道电路 62 或 64。当然，对于音频电路 20，一般而言，连同非立体声音频信号格式一起提供立体声和其它多通道格式可能是想要的。

第一和第二可听见的信号之间的正确的延迟匹配确保来自外部音频系统 14 的可听见的输出正确地与来自便携式音频设备 12 的可听见的输出在时间上对齐。尽管在总的音频信号路径上可能有各种延迟源，但无线链路 16 通常占第二可听见的信号相对于由音频控制器 60 输出的音频信号的延迟的重要部分。因此，延迟单元 72 在音频信号路径上引入了与在便携式音频设备 12 上产生第一可听见信号相关的延迟。

延迟单元 72 用于主要把跟无线链路 16 赋予第二可听见的信号相同的、相对于由音频控制器 60 输出的音频信号的延迟赋予第一可听见的信号。这样的延迟匹配确保在便携式设备 12 输出的第一可听见的信号与外部音频系统 14 输出的第二可听见的信号之间的正确的时间对齐。也就是说，正确的延迟匹配确保由音频系统 14 提供的低音增强相对于在便携式设备 12 上回放的音乐或者其它音频是同相的。

需要的延迟的计算可以基于为无线链路 16、以及对于从外部音频系统 14 相对于用户的可听见的信号延迟假定的默认延迟值，加上与音频信号转换和放大相关的任何延迟，尽管这些附加的延迟通常很小。一种方法允许调谐延迟单元 72 以达到基本完美的延迟匹配。例如，便携式设备 12 可能允许用户设置或者调整被赋予第一可听见的信号的延迟来适应第二可听见的信号相对于音频信号的实际的延迟。然而，匹配于无线链路 16 的特性的默认延迟值，可能还有用于可听见的信号延迟的附加的延迟时间，正常情况下是所需要的全部。

延迟单元 72 的实现依赖于由音频控制器 60 输出的音频信号是以数字的还是模拟的格式被处理。在图示说明中，延迟单元 72 包括通过在硬件或者软件中缓冲音频信号而容易地被实现的数字延迟单元。对于模

LINKPLAY EXHIBIT 1002
Page 192 of 1292

拟信号缓冲，可以使用诸如模拟延迟线的模拟延迟单元。为了更加方便，音频信号可以被转换成数字格式、被延迟、然后被转换回模拟的。

即使在音频信号以数字格式被处理的情况下，把它转换成模拟格式通常是必需的，因为绝大多数类型的扬声器需要模拟输入信号来再生期望的可听见的输出。因此，转换器 74 分别把左和右音频信号转换成适于输入到放大器 76 的模拟信号。转换器 74 可能包括单独的转换器或者可能包括较大的、多通道数字－模拟转换器（DAC）的一部分。本领域的技术人员将认识到各种 DAC 类型可以被使用，例如电流模式的或者电压模式的 DAC，这取决于放大器 76 的输入特性，以及所期望的音频保真度。

无线接口 26 和 28 可以基于，例如，由蓝牙特别兴趣小组公布的蓝牙无线连网标准。尽管这里描述的本发明的示范实施方案使用基于蓝牙的无线链路 16，应当理解其它无线网络类型也可以被使用，例如那些基于 IEEE 802.11b 或者其它标准的无线网络类型。

蓝牙是用于在 2.45GHz 频带中的通用无线电接口的标准，该接口使得便携式电子设备能够通过短程、特设网络来无线地连接和通信。蓝牙标准的综述包含在由 Jaap Haartsen 创作的、题目为“The Bluetooth Radio System(蓝牙无线电系统)”的文章中，该文可以在 IEEE Personal Communications，2000 年 2 月中找到。为了本发明的目的，这里只描述当前感兴趣的蓝牙特性。

蓝牙标准结合允许无线设备在其进入彼此范围内时形成特设网络的搜索程序。通过使用蓝牙接口，便携式音频设备 12 能够识别何时它是在外部音频系统 14 的范围内。蓝牙标准还支持容量协商以便于在进入彼此范围内的设备能够确定所找到的设备的容量。实现蓝牙标准的便携式音频设备 12 可以被编程，以便在兼容的外部音频系统 14 是可利用的时候开始自动地发送增强信号，或者替代地，便携式音频设备 12 可以被编程，以便在兼容的外部音频系统 14 是可利用的时候通知用户。在后一种情况中，用户可以确定是否使能该增强功能。

在想要自动的回放增强的使能以及禁止的情况下，通常在与第一可听见的信号的产生相关的便携式音频设备 12 的音频信号路径中包括延迟单元 72 是有利的。由于这样的延迟是持续的，用户察觉不到与“同步”在音频系统 14 上回放增强和在便携式设备 12 上正在进行的音频回

LINKPLAY EXHIBIT 1002
Page 193 of 1292

放相关的任何音频中断。

蓝牙标准支持同步面向连接（SCO）链路和异步无连接（ACL）链路。SCO 链路是点对点的并且不使用分组重传。因此，SCO 链路对于其中单独的分组数据完整性不重要的话音/音频传输是相对有效的。ACL 链路是分组交换连接并且提供协商分组重试来确保数据传输完整性。因此，蓝牙基带协议代表电路和分组交换的组合。蓝牙能够支持在 720Kbps 上的异步数据通道、高达三个同时的同步话音通道、或者同时支持异步数据以及同步话音的组合通道。由于后面这种能力，便携式设备 12 能够从万维网通过无线链路 16 接收诸如流播的音频的数据用于本地回放，而同时发送它的增强信号到音频系统 14 用于回放增强。

更特别地，便携式音频设备 12 可以使用蓝牙“话音”通道来发送增强信号给外部音频系统 14。这样的话音通道采用 64Kbps 的数据速率并且使用连续可变斜率增量（CVSD）编码，该编码适合发送被用于增强音频回放的低频音频分量。通过使用 CVSD 话音通道，较高速率的蓝牙数据通道对于，正如已经指出的，来自万维网的流播音频或者其它媒体内容的接收或者其它用途保持可用。当然，应当理解蓝牙话音通道的使用是发送音频内容用于回放增强的有效方法，而不管便携式音频设备 12 是经由无线链路 16 接收流播音频，还是在本地从例如包括在音频源 24 中的本地媒体获得音频数据。

通常，除了从便携式音频设备 12 简单传送增强信号到音频系统 14 用于回放增强以外，无线链路 16 还可以支持附加的功能。例如，无线链路 16，无论是否基于无线连网标准，都可以允许便携式音频设备 12 发送控制信号来控制外部音频系统 14 的运行。控制信号可被用于，例如由便携式音频设备 12 提供第二可听见的信号的音量控制以及噪声抑制。

图 5 提供了从本发明的基于无线网络的实施方案得到的灵活性和用户便利的说明。这里，无线网关 90，例如，基于蓝牙的无线网关，通过例如非对称数字用户线（ADSL）或者电缆调制解调器 96 被可通信地耦合到公用交换电话网（PSTN）92，以及耦合到互联网或者其它公用数据网（PDN）94。无线网关 90 包括无线接口 28，或者对等的无线接口能力，以便于它被可通信地耦合到便携式音频设备 12 并且因此能够从所述设备接收增强信号用于由外部音频系统 14 回放增强。同样地，外部音频

LINKPLAY EXHIBIT 1002
Page 194 of 1292

系统 14 也被可通信地耦合到无线网关 90。这样的耦合可以是通过无线通道，或者无线网关 90 可以提供硬接线信号输出以发送接收到的增强信号信息给音频系统 14。

在本示范实施方案中，便携式音频设备 12 通常包括多用途设备以便于除了其它的功能或服务之外，它还提供音频回放能力。例如，便携式音频设备 12 可以除了它的音频回放应用之外，还包括能够运行一个或多个无线通信应用的蜂窝式或者其它无线电话、无线便携式数字助理（PDA）、膝上型电脑等等。同样地，在便携式音频设备 12 和无线网关 90 之间的无线链路 16 可被用于路由万维网或者其它分组数据业务量到便携式音频设备 12 以及从便携式音频设备 12 路由，以及路由话音呼叫数据到它以及从它路由，而不论这样的数据是与 PSTN92 相关还是与 PDN94 相关。

在示范实施方案中，只要便携式设备 12 的进入呼叫在无线网关 90 处被接收到，或者当便携式设备 12 的用户发起呼叫时，则回放增强可以自动地被中止。因此，在便携式设备 12 上的本地音频回放以及在音频系统 14 上的增强回放可以被中止或者被进行噪声抑制以避免干扰用户的话音呼叫。同样地，无线网关 90 可以被配置来识别何时回放增强是活动的，以便于它能够响应于呼叫而中止增强功能。

正如指出的，所述呼叫可以经由无线链路 16 在蓝牙数据或者话音通道上被运送。当回放被中止时，呼叫数据可以在其它情况下被用于回放增强的相同的蓝牙话音通道上被路由；因此用于回放增强的资源可以协同电话或者其它数据发送功能被共享。

当然，无论无线链路 16 是基于蓝牙或是另一种无线连网标准，双向通信链路的采用提供了上面讨论的便于用户实现的特性，例如回放增强的自动开始、自动的噪声抑制、用于由外部音频系统 14 产生的第二可听见的信号的音量/噪声抑制的远程控制。本领域的技术人员将意识到：这些以及其它回放增强功能尽管通过使用蓝牙而变得容易，但它们并不依赖于特定的无线标准，并且可能以各种其它方式实现。

此外，本领域的技术人员将认识到无线链路 16 不必是双向的用于基本的回放增强；便携式设备 12 可能通过使用数字的或者模拟的无线电传输、使用光的发射器/接收机装置，或者由某些其它的传输装置来发送增强信号或者发送低频音频信息用于回放增强。因此，本领域的技

LINKPLAY EXHIBIT 1002
Page 195 of 1292

术人员应当理解前述的讨论提供了本发明的示范实施方案并且不应当被理解成限制。实际上，本发明只被下面的权利要求及其合理的等价物的范围所限制。

LINKPLAY EXHIBIT 1002
Page 196 of 1292

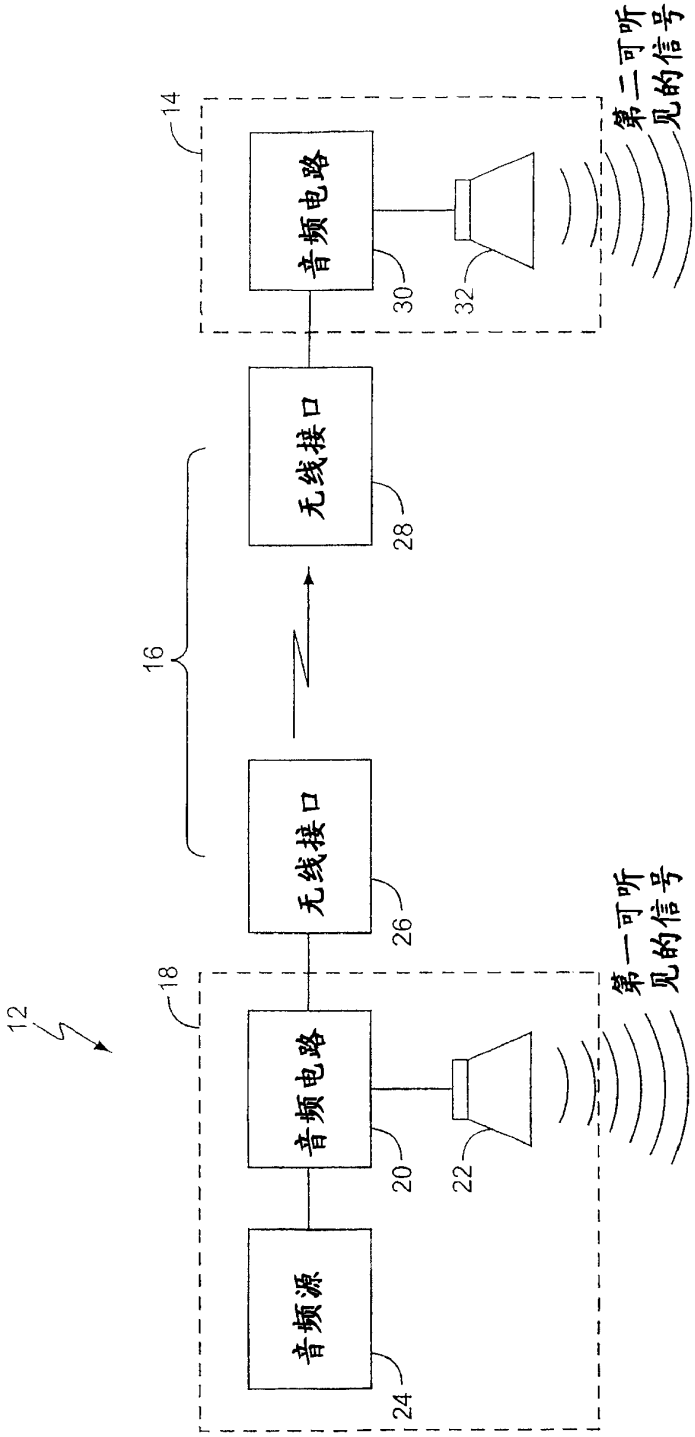


图 1

LINKPLAY EXHIBIT 1002
Page 197 of 1292

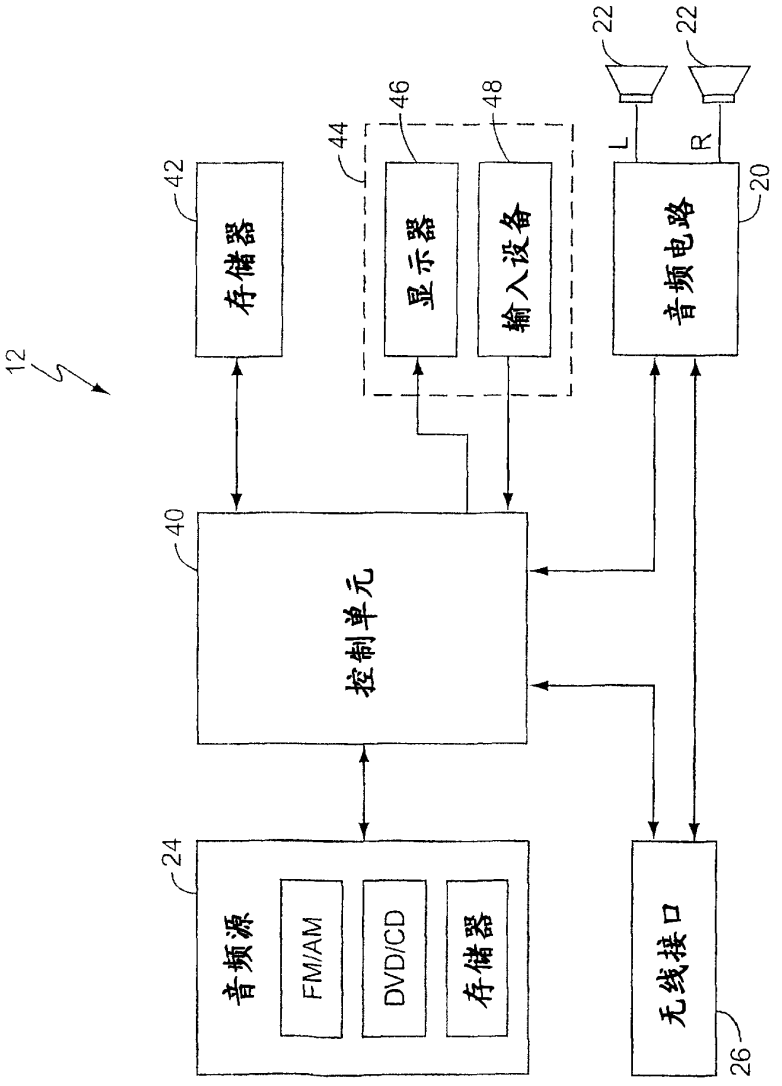


图 2

LINKPLAY EXHIBIT 1002
Page 198 of 1292

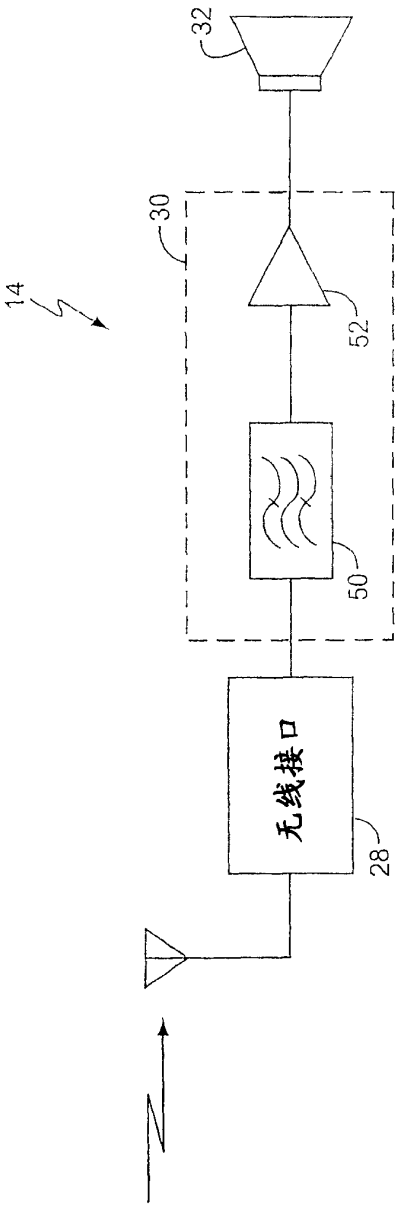


图 3

LINKPLAY EXHIBIT 1002
Page 199 of 1292

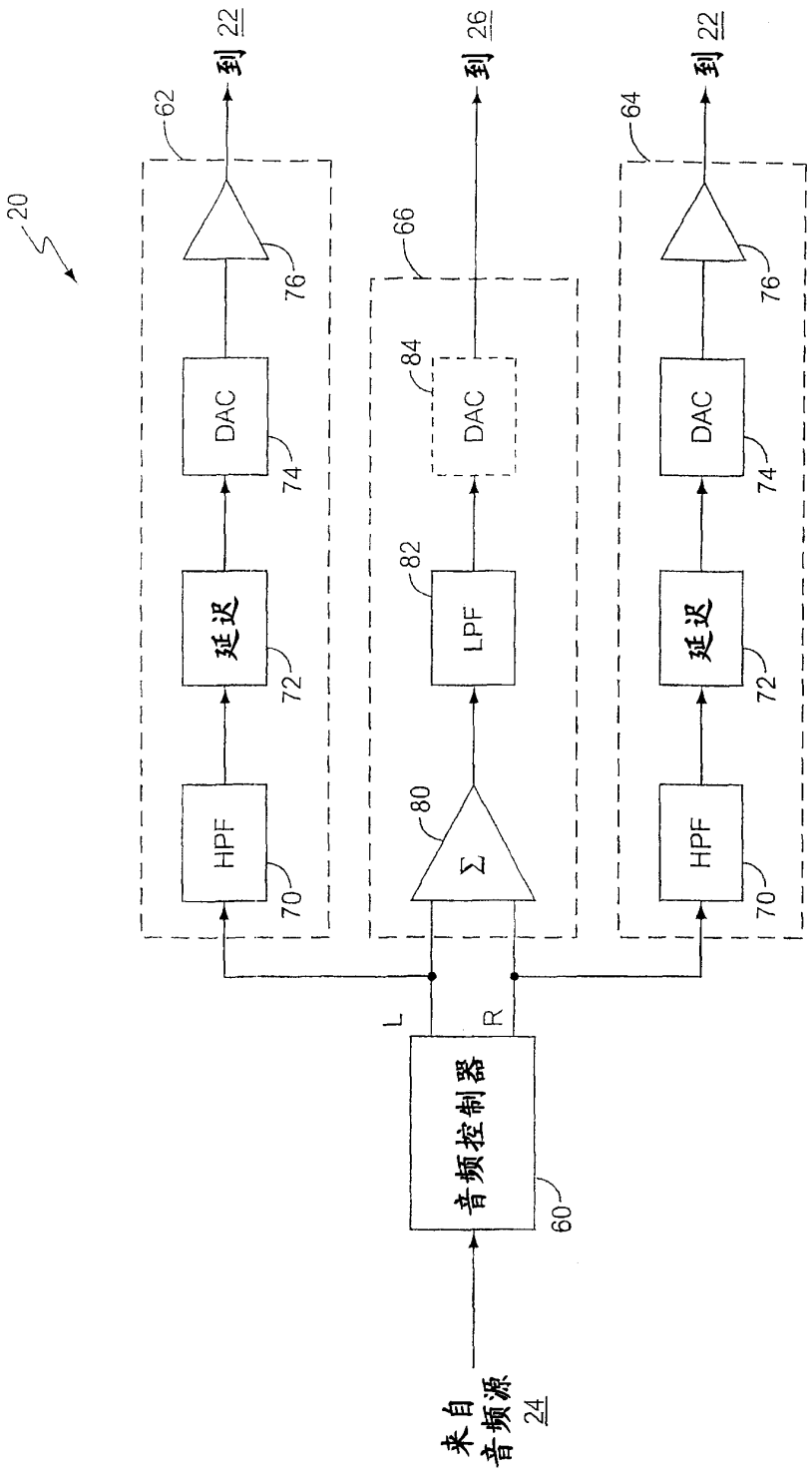


图 4

LINKPLAY EXHIBIT 1002
Page 200 of 1292

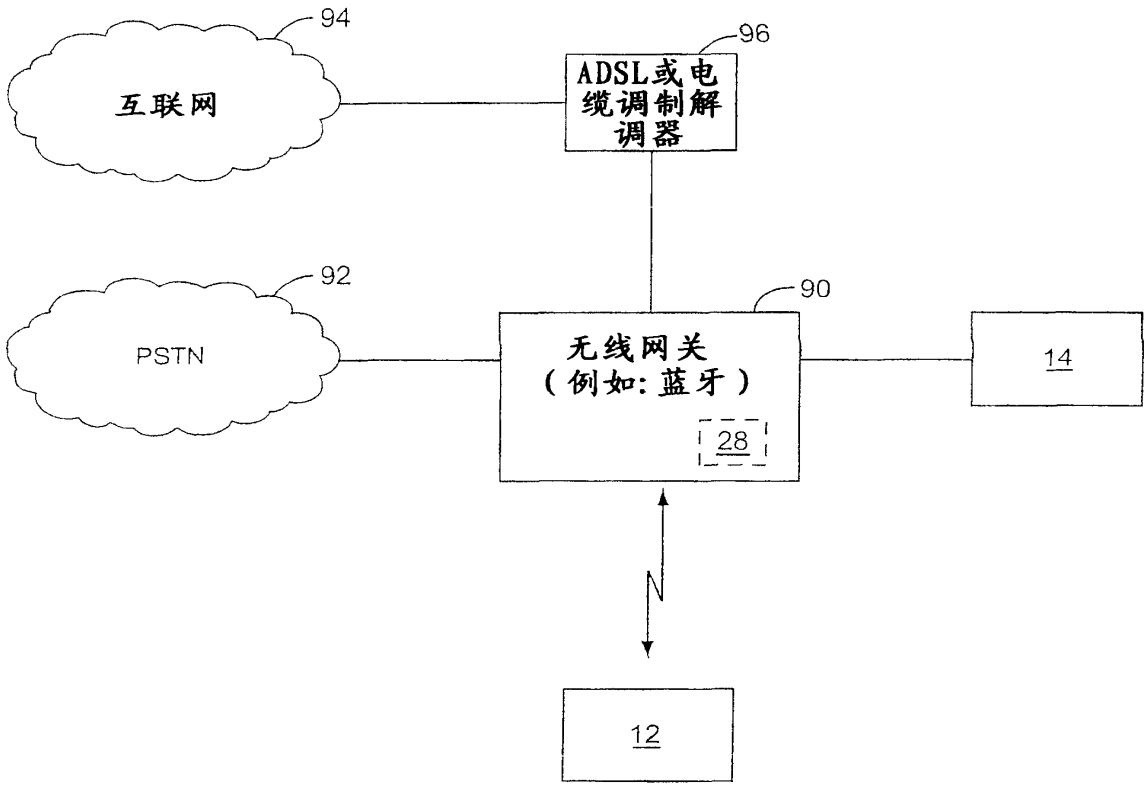


图 5

LINKPLAY EXHIBIT 1002
Page 201 of 1292

Espacenet

Bibliographic data: CN101501775 (A) — 2009-08-05

Media timeline processing infrastructure

Inventor(s): UR RAHMAN SHAFIQ [US]; BAIG MOHAMMED SOHAIL [US] ± (RAHMAN SHAFIQ UR, ; MOHAMMED SOHAIL BAIG)

Applicant(s): MICROSOFT CORP [US] ± (MICROSOFT CORP)

Classification: **- international:** ***G11B27/00***
- cooperative: **G11B27/034**; **G11B27/322**; **H04N21/8456**

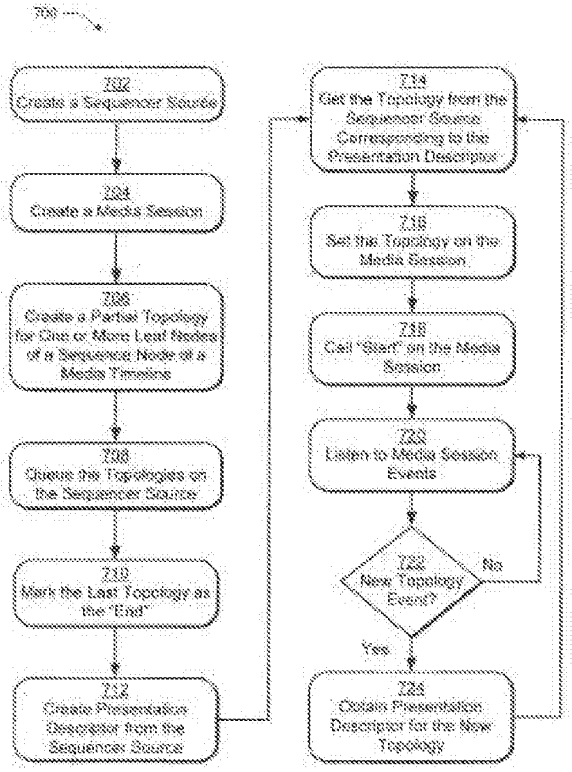
Application number: CN20068012946 20060316

Priority number(s): US20050109291 20050419

Also published as: AU2006237532 (A1) CA2600491 (A1) EP1883887 (A2) JP2008538675 (A) KR20070121662 (A) more

Abstract of CN101501775 (A)

A media timeline processing infrastructure is described. In an implementation, one or more computer readable media include computer executable instructs that, when executed, provide an infrastructure having an application programming interface that is configured to accept a plurality of segments from an application for sequential rendering. Each of the segments reference at least one media item for rendering by the infrastructure and each segment is taken from a media timeline by an application.


700
702
Create a Sequencer Source
704
Create a Media Session
706
Create a Partial Topology for One or More Leaf Nodes of a Sequence Node of a Media Timeline
708
Queue the Topologies on the Sequencer Source
710
Mark the Last Topology as the "End"
712
Create Presentation Descriptor from the Sequencer Source
714
Get the Topology from the Sequencer Source Corresponding to the Presentation Descriptor
716
Set the Topology on the Media Session
718
Call "Start" on the Media Session
720
Listen to Media Session Events
722
New Topology Event?
No
Yes
724
Obtain Presentation Descriptor for the New Topology

[19] 中华人民共和国国家知识产权局

[51] Int. Cl.
G11B 27/00 (2006.01)

[12] 发明专利申请公布说明书

[21] 申请号 200680012946.3

[43] 公开日 2009 年 8 月 5 日

[11] 公开号 CN 101501775A

[22] 申请日 2006.3.16
[21] 申请号 200680012946.3
[30] 优先权
[32] 2005. 4.19 [33] US [31] 11/109,291
[86] 国际申请 PCT/US2006/009905 2006.3.16
[87] 国际公布 WO2006/113018 英 2006.10.26
[85] 进入国家阶段日期 2007.10.18
[71] 申请人 微软公司
地址 美国华盛顿州
[72] 发明人 A·V·格里格罗维奇
S·U·拉赫曼 S·B·穆罕默德
G·T·顿巴
[74] 专利代理机构 上海专利商标事务所有限公司
代理人 陈 斌

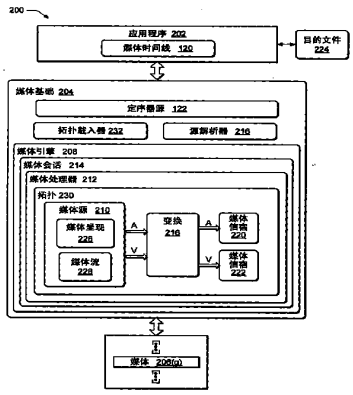
权利要求书 3 页 说明书 20 页 附图 14 页

[54] 发明名称

媒体时间线处理基础结构

[57] 摘要

描述了一种媒体时间线处理基础结构。 在一实现中，一个或多个计算机可读介质包括计算机可执行指令，这些计算机可执行指令在执行时提供具有应用程序编程界面的基础结构，该应用程序编程界面被配置成从应用程序接受多个片段以供顺序再现。 每个片段引用至少一个媒体项以供该基础结构再现，且每个片段由应用程序从媒体时间线取得。



1. 一种方法，包括执行一应用程序以：

从媒体时间线导出多个片段，其中：

所述媒体时间线引用多个媒体；以及

每个所述片段引用要在所述片段的持续时间再现的媒体；以及

经由应用程序编程界面使所述多个片段排队以供基础结构再现。

2. 如权利要求 1 所述的方法，其特征在于，所述媒体时间线引用至少两个不同类型的媒体。

3. 如权利要求 1 所述的方法，其特征在于，所述应用程序不被配置成再现所述媒体本身。

4. 如权利要求 1 所述的方法，其特征在于，所述应用程序不知道一个或多个所述媒体如何由所述基础结构再现。

5. 如权利要求 1 所述的方法，其特征在于，所述多个片段在一数据结构中排队以供所述基础结构再现，所述数据结构由所述基础结构经由所述应用程序编程界面展现给所述应用程序。

6. 如权利要求 1 所述的方法，其特征在于，所述媒体时间线利用一种或多种专用技术来描述所述媒体时间线，这些专用技术不由所述应用程序展现给所述基础结构。

7. 如权利要求 1 所述的方法，其特征在于，还包括通过所述应用程序与所述基础结构经由所述应用程序编程的交互，改变至少一个所述片段的拓扑同时再现另一个所述片段。

8. 如权利要求 1 所述的方法，其特征在于，还包括经由用户界面接收由所述应用程序输出的再现所述媒体时间线的请求。

9. 一种方法，包括：

接收由应用程序再现媒体时间线的请求，其中所述媒体时间线：

包括多个节点；以及

相关于第二所述节点引用的第二媒体定义对第一所述节点引用的第一媒体的呈现；

由所述应用程序从所述媒体时间线导出多个片段，其中每个所述片段包括要

LINKPLAY EXHIBIT 1002
Page 205 of 1292

在所述片段的持续时间再现的一个或多个节点；以及

由所述应用程序经由应用程序编程界面传递所述多个片段以供基础结构再现，从而所述应用程序不知道一个或多个所述媒体如何由所述基础结构再现。

10. 如权利要求 9 所述的方法，其特征在于，所述多个片段在数据结构中排队以供所述基础结构再现，所述数据结构由所述基础结构经由所述应用程序编程界面展现给所述应用程序。

11. 如权利要求 10 所述的方法，其特征在于，还包括通过所述应用程序与所述基础结构经由所述应用程序编程的交互，改变至少一个所述片段的拓扑同时再现另一个所述片段。

12. 如权利要求 9 所述的方法，其特征在于，所述媒体时间线利用一种或多种专用技术来描述所述媒体时间线，这些专用技术不由所述应用程序展现给所述基础结构。

13. 如权利要求 9 所述的方法，其特征在于，所述应用程序不知道一个或多个所述媒体如何由所述基础结构再现。

14. 如权利要求 9 所述的方法，其特征在于，所述应用程序不被配置成再现所述媒体本身。

15. 一个或多个包括计算机可执行指令的计算机可读介质，所述计算机可执行指令在执行时提供具有应用程序编程界面的基础结构，所述应用程序编程界面被配置成从应用程序接受多个片段以供顺序再现，其中每个所述片段：

引用至少一个媒体项以供所述基础结构再现；以及

由应用程序从媒体时间线分割取得。

16. 如权利要求 15 所述的一个或多个计算机可读介质，其特征在于，所述多个片段在数据结构中排队以供所述基础结构再现，所述数据结构经由所述应用程序编程界面展现给所述应用程序。

17. 如权利要求 16 所述的一个或多个计算机可读介质，其特征在于，所述基础结构被配置成接受所述应用程序对至少一个所述片段的拓扑作出的改变，同时再现另一所述片段。

18. 如权利要求 15 所述的一个或多个计算机可读介质，其特征在于，所述所述媒体时间线利用一种或多种专用技术来描述所述媒体时间线，这些专用技术不由所述应用程序展现给所述基础结构。

19. 如权利要求 15 所述的一个或多个计算机可读介质，其特征在于，所述应

LINKPLAY EXHIBIT 1002
Page 206 of 1292

用程序不知道一个或多个所述媒体如何由所述基础结构再现。

20. 如权利要求 15 所述的一个或多个计算机可读介质，其特征在于，所述应用程序不被配置成再现所述媒体本身。

LINKPLAY EXHIBIT 1002
Page 207 of 1292

媒体时间线处理基础结构

技术领域

本发明一般涉及媒体，尤其涉及媒体时间线处理基础结构。

背景技术

诸如台式 PC、机顶盒、个人数字助理（PDA）等的计算机的用户可访问来自不断增加的各种源的不断增加数量的媒体。例如，用户可与执行多个应用程序的台式 PC 交互以提供诸如家庭录像、歌曲、幻灯片演示等输出用媒体。用户还可利用机顶盒来接收经广播网络广播到机顶盒的传统电视节目。此外，机顶盒可被配置为个人录像机（PVR），从而用户可将广播内容存储在机顶盒上的存储器内以便于后来回放。此外，用户可与执行多个应用程序使用户可读取和发送电子邮件、玩视频游戏、查看电子表格等的无线电话交互。

由于各种各样的媒体源和各种各样的可用来提供媒体并与之交互的计算机，传统的应用程序和计算机常常被配置成具体地寻址各种特定类型的媒体。例如，在视频游戏控制台上执行以输出视频游戏的应用程序常常被配置成向电视机提供应用程序的输出，而不被配置成提供可由其它计算机和其它设备利用的输出。因此，呈现由诸如计算机和/或应用程序的不同媒体源提供的内容可涉及时间和设备密集的多个应用程序和设备。此外，在同一计算机上执行的多个应用程序可被配置成具体地寻址由各相应应用程序提供的特定类媒体。例如，第一音频回放应用程序可被配置成输出配置为歌曲的媒体。但是，第二音频回放应用程序可被配置成以与第一音频回放应用程序不兼容的音频格式，诸如音频命令（audio-dictation）格式来记录和回放录音节目。因而，甚至被配置成在同一计算机上执行的应用程序和例如音频的相同类型媒体可提供彼此不兼容的媒体。

时间线向用户提供定义媒体呈现的方法。例如，媒体播放器可播放通常称为“播放列表”的一歌曲列表。然而，传统的时间线受到各种各样的媒体源和可用来提供媒体并与之交互的各种各样的计算机配置限制。当需要输出例如不同类型的媒体时，每个应用程序需要“理解”每种类型的媒体，诸如如何再现特定类型的媒体。这可导致计算机硬件和软件资源的低效使用。

LINKPLAY EXHIBIT 1002
Page 208 of 1292

因此，持续需要提供用于处理媒体时间线的经改进技术。

发明内容

描述了媒体时间线处理基础结构。在一实现中，描述了一种执行应用程序以从媒体时间线导出多个片段的方法。该媒体时间线引用多个媒体，而每个片段引用在该片段持续期间要再现的媒体。应用程序被执行以使供基础结构再现的多个片段排队。

在另一实现中，一个或多个计算机可读介质包括在执行时提供具有一应用程序编程界面的基础结构的计算机可执行指令，该应用程序编程界面被配置成从应用程序接受多个片段用于顺序再现。各个片段引用供基础结构再现的至少一个媒体项，并且是该应用程序从媒体时间线取得的一个片段。

附图说明

图 1 是计算机提供对多个媒体的访问的一示例性实现中环境的示图。

图 2 是一示例性实现中系统的高级框图，在该示例性实现中用软件实现的系统包括与媒体基础交互以控制多个媒体的呈现的应用程序。

图 3 是示出在图 2 的应用程序、定序器源和媒体会话之间交互的系统的一示例性实现的示图。

图 4 是其中媒体时间线被示为包括提供媒体输出以便呈现的多个节点的树形结构的一示例性实现的示图。

图 5 是示出顺序节点和作为顺序节点的子节点的多个叶节点的一示例性实现示图。

图 6 是示出并行节点和作为并行节点的子节点的多个叶节点的一示例性实现的示图。

图 7 是示出应用程序与媒体会话和定序器源交互以使配置为播放列表的媒体时间线再现的一示例性实现中过程的流程图。

图 8 是示出在指定时段上第一和第二媒体的输出的一示例性实现的示图，该输出利用在第一和第二媒体之间转换的效果。

图 9 是适于实现图 8 的匀滑转换效果的一示例性实现中媒体时间线的示图。

图 10 是示出应用程序从图 9 的媒体时间线导出的多个片段以供媒体时间线处理基础结构再现的一示例性实现的示图。

LINKPLAY EXHIBIT 1002
Page 209 of 1292

图 11 是示出应用程序将媒体时间线分段成多个拓扑以供媒体时间线处理基础结构再现的一示例性实现中过程的流程图。

图 12 是一示例性操作环境的示图。

图 13 是示出包括由通过 ASX 文件扩展名标识的 Windows®媒体播放器列表文件所述的一个顺序节点和三个叶节点的媒体时间线的一示例性实现的示图。

图 14 是示出包括具有由可执行时间语言（XTL）文件所述的两个子顺序节点的一并行节点的媒体时间线的一示例性实现的示图。

相同的标号在所有公开内容和附图中用来引用相似的组件和特征。

具体实施方式

纵览

描述了一种媒体时间线处理基础结构。媒体时间线向用户提供基于媒体，诸如现有媒体（例如，诸如视频、歌曲、文档等已存储媒体）和/或从诸如流式音频和/或视频的媒体源“实时”输出的媒体定义呈现的技术。该媒体时间线可被用来表达媒体的分组和/或组合，并提供由媒体时间线处理基础结构使用的构成元数据，该基础结构执行（例如再现）由媒体时间线引用的媒体以提供最终呈现。

不同的多媒体应用程序可具有用于处理媒体集的不同媒体时间线对象模型。例如，媒体播放器可使用播放列表来按顺序播放媒体。另一方面，编辑应用程序可使用被配置为情节串连板的媒体时间线来编辑该媒体的呈现。另一个应用程序可使用基于事件的时间线，而媒体回放基于特定事件在各条目之间跳跃。因此，可遇到各种各样的媒体时间线对象模型，这些对象模型彼此不同从而每个应用程序可具有它自己的定制媒体时间线方案。

在一实现中，描述了一种媒体时间线处理基础结构，它向应用程序提供“基础级”支持，使应用程序可再现对应用程序特定的媒体时间线。例如，该媒体时间线处理基础结构可被配置成允许应用程序能将不随时段改变的媒体片段排队，但让基础结构自身“断定”如何再现片段。在另一示例中，媒体时间线处理基础结构被配置成允许应用程序在再现片段期间删除或更新“正在进行”的片段，且该基础结构按需处理更新该片段再现的所有细微差别。因而，与媒体时间线处理基础结构相接触的应用程序仅需通过将媒体时间线转换成媒体时间线处理基础结构所理解的片段序列，集中于该应用程序的特定媒体时间线对象模型的特性。

在以下讨论中，首先描述可用来采用媒体时间线处理基础结构的一示例性环

LINKPLAY EXHIBIT 1002
Page 210 of 1292

境。然后描述可在该示例性环境以及其它环境中操作的示例性过程。

示例性环境

图 1 是计算机 102 提供对多个媒体的访问的一示例性实现的环境 100 的示图。如图所示，计算机 102 被配置为个人计算机（PC）。计算机 102 还可采取各种其它配置，诸如移动站、娱乐设施、与显示设备通信耦合的机顶盒、无线电话、视频游戏控制台、个人数字助理（PDA）等。因而，计算机 102 的范围可从具有相当存储器和处理器资源的全资源设备（例如 PC、装有硬盘的电视录像机）到具有有限存储器和/或处理资源的低资源设备（例如传统机顶盒）。计算机 102 的另外实现相关于图 12 进行描述。

计算机 102 可从各种媒体源中获得各种媒体。例如，计算机 102 可本地地存储多个媒体 104(1)、…、104(k)、…、104(K)。该多个媒体 104(1)- 104(K)可包括具有诸如 WMV、WMA、MPEG1、MPEG2、MP3 等各种格式的音频和视频内容的分类。此外，媒体 104(1)- 104(K)可从各种源获得，诸如从输入设备、应用程序的执行等等。

计算机 102 例如可包括多个应用程序 106(1)、…、106(n)、…、106(N)。多个应用程序 106(1)- 106(N)的一个或多个可被执行以提供诸如文档、电子表格、视频、音频等的媒体。此外，多个应用程序 106(1)- 106(N)的一个或多个可被配置成提供媒体交互，诸如媒体 104(1)- 104(K)的编码、编辑、和/或回放。

计算机 102 还可包括多个输入设备 108(1)、…、108(m)、…、108(M)。多个输入设备 108(1)- 108(M)的一个或多个可被配置成提供用于输入到计算机 102 的媒体。输入设备 108(1)例如被示为话筒，它被配置成提供诸如用户语音、音乐会上的歌曲等音频数据的输入。多个输入设备 108(1)- 108(M)还可被配置成用于用户交互以提供控制多个应用程序 106(1)- 106(N)的执行的输入。例如，输入设备 108(1)可用来输入来自用户的语音命令，诸如启动多个应用程序 106(1)- 106(N)的特定之一的执行、控制多个应用程序 106(1)- 106(N)的执行等。在另一示例中，输入设备 108(m)被示为键盘，它被配置成提供控制计算机 102 的输入，诸如调节计算机 102 的设置。

此外，计算机 102 可包括多个输出设备 110(1)、…、110(j)、…、110(J)。输出设备 110(1)- 110(J)可被配置成再现媒体 104(1)- 104(K)以向用户输出。例如，输出设备 110(1)被示为用于再现音频数据的扬声器。输出设备 110(j)被示为诸如电视机的显示设备，它被配置成再现音频和/或视频数据。因而，多个媒体 104(1)- 104(K)的一个或多个可由输入设备 108(1)- 108(M)提供并由计算机 102 本地存储。尽管多

LINKPLAY EXHIBIT 1002
Page 211 of 1292

个输入和输出设备 108(1)- 108(M)、110(1)- 110(J)被分别地示出，但输入和输出设备 108(1)- 108(M)、110(1)- 110(J)的一个或多个可被组合成单个设备，诸如具有输入用按钮、显示设备和扬声器的电视机。

计算机 102 还可被配置成经由网络 112 通信以获得在网络 112 上远程可用的媒体。网络 112 被示为因特网，并可包括各种网络，如内联网、有线或无线电话网络、广播网络和其它广域网。远程计算机 114 与网络 112 通信耦合，从而远程计算机 114 可向计算机 102 提供媒体。例如，远程计算机 114 可包括一个或多个应用程序以及提供诸如家庭影院的媒体的摄影机 116。该远程计算机 114 还可包括输出媒体的输出设备，诸如所示的显示设备 118。由计算机 102 经由网络 112 从远程计算机 114 获得的媒体可与媒体 104(1)- 104(K)一起本地存储。换言之，媒体 104(1)-104(K)可包括经由网络 112 从远程计算机 114 获得的媒体的本地存储副本。

因而，计算机 102 可获得并存储多个媒体 104(1)-104(K)，这些媒体 104(1)-104(K)可在本地提供（例如通过执行多个应用程序 106(1)-106(N)和/或使用多个输入设备 108(1)-108(M)），并且从远程计算机 114 远程地提供（例如通过执行应用程序和/或使用输入设备）。尽管多个媒体 104(1)-104(K)已被描述为存储在计算机 102 上，但媒体 104(1)-104(K)也可“实时”地提供。例如，音频数据可从被示为话筒的输入设备 108(1)中流入而无需存储该音频数据。

计算机 102 被示为包括媒体时间线 120。如前所述，媒体时间线 120 向用户提供一种从多个媒体源呈现所存储的和/或实时的媒体的技术。例如，媒体时间线 120 可描述从输入设备 108(1)-108(M)、应用程序 106(1)-106(N)、和/或远程计算机 114 中获得的媒体集合。例如用户可利用输入设备 108(1)-108(M)的一个或多个来与应用程序 106(n)交互，以定义媒体 104(1)-104(K)的分组和/或组合。用户还可定义呈现媒体 104(1)-104(K)的顺序和效果。定序器源 122 然后可在计算机 102 上执行以再现媒体时间线 120。该媒体时间线 120 在再现时提供媒体 104(1)-104(K)的经表达分组和/或组合，以供多个输出设备 110(1)- 110(J)的一个或多个再现。定序器源 122 的执行的进一步讨论可相对以下附图进行。

图 2 是一示例性实现中系统 200 的高级框图，在该实现中用软件实现的系统 200 包括与媒体基础 204 交互以控制多个媒体 206(g)的呈现的应用程序 202，其中 g 是从 1 到“G”的任意数字。媒体基础 204 可作为操作系统的一部分包括在内以提供媒体 206(g)的回放，从而与操作系统交互的应用程序可在不“知道”如何再现媒体的特定细节的情况下控制媒体 206(g)的回放。因而，媒体基础 204 可提供媒体

LINKPLAY EXHIBIT 1002
Page 212 of 1292

时间线处理基础结构的一部分以处理应用程序 202 的媒体时间线 120。媒体 206(g)可通过执行应用程序 106(1)-106(N)、使用输入设备 108(1)-108(M)、输出设备 110(1)-110(J)等从各种源提供，诸如从图 1 的媒体 104(1)-104(K)提供。

可与图 1 的应用程序 106(1)-106(N)相同或不同的应用程序 202 与媒体引擎 208 交互以控制媒体 104(1)-104(K)。在至少一些实施例中，媒体引擎 208 用作想要一定程度地参与呈现的应用程序 202 的中心焦点。在本文档中使用时，呈现意指或描述媒体的处理。在所示和所述的实施例中，呈现用于描述媒体引擎 208 对之执行操作的数据格式。因而，呈现可导致诸如多媒体呈现的可视和/或可听呈现媒体，在该多媒体呈现中音频和所伴随的视频在诸如图 1 的被示为可与台式 PC 相关联的显示设备的输出设备 110(j)的显示设备上再现的窗口内向用户呈现。呈现也可导致将媒体内容写入诸如盘文件的计算机可读介质。因而，呈现并不限于多媒体内容在计算机上再现的情形。在一些实施例中，诸如解码、编码和各种变换（诸如转换、效果等）的操作可作为呈现的结果而进行。

在一实施例中，媒体基础 204 揭示可由应用程序 202 调用以再现媒体 206(g)的一个或多个应用程序界面。例如，媒体基础 204 可被视为存在于在图 1 的计算机 102 上执行的软件的“基础结构”层上。换言之，媒体基础 204 是由应用程序 202 用来呈现媒体 206(g)的软件层。因而，媒体基础 204 可被用来使每个应用程序 202 不必对可用于系统 200 的每类媒体 206(g)实现单独代码。这样，媒体基础 204 提供一组可重复使用的软件组件来实现媒体特定任务。

媒体基础 204 可使用数个组件，其中包括定序器源 122、媒体源 210、媒体处理器 212、媒体会话 214、媒体引擎 208、媒体解析器 216、一个或多个变换 218、一个或多个媒体信宿 220、222 等。各个所示和所述实施例的一个优点是系统 200 在各种不同类组件可结合本文所述系统使用的意义上而言是可插入模型。也作为系统 200 的一部分包括在内是目的文件（destination）224，如下文中更详细地所述。然而，在至少一个实施例中，目的文件 224 是定义要在哪里（例如窗口、盘文件等）呈现、以及在呈现时要发生什么的对象。即，目的文件可对应于数据流入其中的一个或多个媒体信宿 220、222。

媒体时间线被视为应用程序 202 的一部分。媒体时间线 120 可用各种方式配置以表达要如何再现多个媒体。例如，媒体时间线可采用向应用程序 202 的用户提供基于由媒体基础 204 再现的媒体定义呈现的方法的一个对象模型。例如，媒体时间线 120 的范围可以是从媒体文件的顺序列表到更复杂的形式。例如，媒体时间线

LINKPLAY EXHIBIT 1002
Page 213 of 1292

120 可采用诸如 SMIL 和 AAF 的文件结构来表达包括媒体之间的转换、效果等的媒体回放体验。例如，应用程序 202 可被配置为可播放通常称为播放列表的歌曲列表的媒体播放器。作为另一示例，在编辑系统中，用户可将一个视频覆盖到另一视频上、剪辑一媒体、向媒体添加效果等等。这样的媒体分组或组合可使用媒体时间线 120 来表达。对媒体时间线 120 的讨论相关于图 4 开始。

媒体源 210 被用来抽象媒体的供应者。例如，媒体源 210 可被配置为从一特定源读取特定类型的媒体。例如，一类媒体源可从外部世界（例如相机）捕捉视频，而另一类媒体源则可捕捉音频（例如话筒）。或者或此外，媒体源 210 可从盘中读取经压缩的数据流，并将该数据流分成其经压缩视频和经压缩音频成分。又一种媒体源 210 可从图 1 的网络 112 中获取数据。因而，媒体源 210 可用来提供获取媒体的一致界面。

媒体源 210 提供一个或多个媒体呈现 226 对象（媒体呈现）。媒体呈现 226 抽象相关媒体流集的描述。例如，媒体呈现 226 可提供影片的成对音频和视频流。此外，媒体呈现 226 可描述媒体源 210 在给定时间点的配置。例如，媒体呈现 226 可包含有关媒体源 210 的信息，包括媒体源 210 的可用流及其例如音频、视频、MPEG 等媒体类型的描述。

媒体源 210 也可提供可表示来自媒体源 210 的单个流的媒体流 228 对象（媒体流），该媒体源 210 可由应用程序 202 访问，即展现给应用程序 202。媒体流 228 因而允许应用程序 202 检索媒体 206(g)的样本。在一实现中，媒体流 228 被配置成提供单个媒体类型，而定序器源 122 可被用来提供多媒体类型，其进一步的讨论相关于图 3 进行。媒体源可提供一个以上媒体流。例如，wmv 文件可在同一文件中具有音频和视频。该文件的媒体源因此将提供两个流，一个为音频而另一个为视频。因此，在媒体基础 204 中，媒体源 210 表示输出呈现用样本的软件组件。

定序器源 122 被配置成从应用程序 202 接收片段，该应用程序 202 然后使这些片段在媒体会话 214 上排队以使这些片段再现。因而，定序器源 122 可用来隐藏再现媒体时间线 120 的错综复杂，以从媒体基础 204 的其它组件提供由媒体时间线 120 描述的媒体。

例如，由定序器源 122 接收的片段可用来从应用程序 202 所接收的片段创建一拓扑 230。该拓扑 230 定义对于一给定呈现数据如何流过各个组件。“全”拓扑包括用来处理数据使数据在不同组件之间有正确格式转换的情况下流动的每个组件，例如软件模块。定序器源 122 与媒体会话 214 交互，媒体会话 214 处理连续拓

LINKPLAY EXHIBIT 1002
Page 214 of 1292

扑之间的“切换”以供媒体处理器 212 再现。例如，定序器源 122 可在媒体会话 214 上使拓扑 230“排队”以供再现。定序器源 122、应用程序 202 和媒体会话 214 的交互的进一步讨论可相关于图 3 进行。

当创建了一拓扑时，用户可选择部分地创建之。但是该部分拓扑本身不足以提供最终呈现。因此，称为拓扑载入器 232 的组件可取得该部分拓扑，并通过在部分拓扑中添加各组件之间的适当数据换算变换将其转换成全拓扑。

例如，在拓扑 230 中，数据一般源自媒体源 210、流过一个或多个变换 218、并进入一个或多个媒体信宿 220、222。变换 218 可包括通常用于呈现中的任何适当数据处理组件。这些组件可包括以本领域技术人员所理解的某方式（诸如向数据添加一效果）经解压缩的压缩数据和/或对数据进行操作的组件。例如，对于视频数据，变换可包括影响亮度、色彩转换、以及调整大小等的变换。对音频数据，变换可包括影响混响和重复采样的变换。此外，解码和编码也可通过变换进行。

媒体信宿 220、222 通常与一特定类媒体内容相关联。因而，音频内容可具有诸如音频再现器的相关联音频信宿。类似地，视频内容可具有诸如视频再现器的相关联视频信宿。其它的媒体信宿可向诸如计算机可读媒体（例如盘文件等）发送数据，经由网络流动数据，诸如广播无线电节目等。

媒体会话 214 是可安排多个呈现时间的组件。因此，媒体处理器 212 可用来驱动一给定呈现，而媒体会话 214 用来安排多个呈现时间。例如，媒体会话 214 可改变如前所述由媒体处理器 212 再现的拓扑。例如，媒体会话 214 可从在媒体处理器 212 上再现的第一拓扑变成第二拓扑，从而使来自由相应拓扑描述的连续呈现的样本的再现之间没有间隙。因而，媒体会话 214 可在媒体回放从一个呈现移到另一呈现时提供无缝用户体验。

源解析器 216 组件可用来从 URL 和/或字节流对象创建媒体源 210。该源解析器 216 可在不需要有关由指定资源产生的数据形式的现有知识的情况下提供创建媒体源 210 的同步和异步方法。

在至少一实施例中，媒体基础 204 用来抽取掉媒体基础 204 的各个组件的存在及其相互之间交互的具体细节。即，在一些实施例中，看来驻留在媒体基础 204 内的组件在编程意义上而言对应用程序 202 不可见。这允许媒体基础 204 执行所谓“黑箱”会话。例如，媒体引擎 208 可通过向媒体会话 214 提供某数据，诸如关联于媒体（例如 URL）和目的文件 224 的信息与该媒体会话交互，并可向媒体会话 214 转发应用程序 202 的命令（例如打开、开始、停止等）。该媒体会话 214 然后

LINKPLAY EXHIBIT 1002
Page 215 of 1292

取得所提供的信息，并使用适当的目的文件创建适当的呈现。因而，媒体基础 204 可展现多个软件组件，这些软件组件在由应用程序 202 使用的应用程序编程界面上提供媒体功能。

定序器源 122 还可用来对特定时间线对象模型写入媒体源。例如，如果影片播放器具有用来表示其时间线的专用文件格式，则该影片播放器可使用定序器源 122 来创建将向媒体基础 204 再现其呈现的“独立”媒体源。因此，使用媒体基础 204 的应用程序然后可在播放任意其它媒体文件时直接播放影片播放器的文件。

此外，媒体基础 204 允许第三方基于其扩展名、模式、报头等注册一特定文件类型。例如，该第三方可注册理解该文件格式的称为“字节流插件”的对象。因此，当发现该特定格式的文件时，它创建所注册的字节流插件，并请求其创建可从该文件取得媒体样本的媒体源。继续前面的示例，影片播放器可为其特定文件类型注册一字节流插件。当调用该字节流插件时，它可解析媒体时间线并“了解”形成该呈现的拓扑。该插件然后可在定序器源上使这些拓扑排队，并依赖该定序器源连续回放这些拓扑。对于应用程序 202，这看起来类似于文件的任一其它媒体源被给予媒体基础 204，并且就像正常的音频或视频文件一样回放。

图 3 是示出在图 2 的应用程序 202、定序器源 122 和媒体会话 214 之间交互的系统 300 的一示例性实现的示图。如图 3 所示，应用程序 202 可与定序器源 122 和媒体会话 214 接触以使该媒体时间线 120 再现。

系统的箭头示出数据、控制和状态如何在系统 300 的组件之间流动。例如，应用程序 202 被视为与媒体会话 214 接触。箭头 302 表示控制信息通过应用程序编程界面从应用程序 202 到媒体会话 214 的传送。各种控制信息可由应用程序 202 传送到媒体会话 214，诸如在媒体会话 214 上“设置”拓扑、调用“开始”以启动设定拓扑的再现、调用“停止”以终止设定拓扑的再现等等。箭头 304 表示状态信息从媒体会话 214 到应用程序 202 的流动，诸如确认拓扑已被设置、“开始”或“停止”调用已被实现、媒体会话 214 对拓扑的再现的当前状态等等。

应用程序 202 也被示为与定序器源 122 接触。箭头 306 表示部分拓扑从应用程序 202 到定序器源 122 的传送，而箭头 308 表示状态信息从定序器源 122 到应用程序 202 的传送。例如，如前所述，应用程序 202 可分割媒体时间线 120，并使各片段在定序器源 122 上排队以供再现。定序器源 122 然后可起动事件以通知媒体处理器和媒体会话：新的呈现可用于再现。这些呈现然后可由会话拾取、解析并排队等候，以在一旦当前呈现的再现已完成时给予处理器，其进一步的讨论可相关于图

LINKPLAY EXHIBIT 1002
Page 216 of 1292

4 进行。

定序器源 122 也可被媒体会话 214 视为媒体源。例如，定序器源 122 可在媒体会话 214 上设置一拓扑，它指定媒体源是定序器源 122。定序器源 122 然后可集聚来自多个媒体源（例如媒体源 210(1)、210(2)）的媒体，并将来自媒体源的媒体提供给媒体处理器 212。在一实现中，定序器源 122 可集聚不同类型的媒体并使该媒体显现为单个媒体源。例如，样本可从媒体源 210(1)、210(2)直接流至媒体处理器，并从媒体处理器流至媒体会话以给予比特泵（bitpump），如箭头 310-314 所示。定序器源 122 可对媒体源 210(1)、210(2)所接收的样本加以时戳，并向媒体处理器 212 提供这些样本以供并发再现。定序器源 122 也可控制媒体源 210(1)、210(2)的操作，这在图 3 中分别如箭头 316、318 所示。也可预期各种各样的其它示例。

媒体会话 214 也可被执行以控制定序器源 122 的操作，如箭头 320 示为控制信息从媒体会话 214 到定序器源 122 的流动。例如，媒体会话 214 可接收“开始”调用以开始再现一拓扑。该拓扑可指定定序器源 122 为拓扑中的媒体源。因此，媒体处理器 212 在再现该拓扑时可在定序器源 122 上调用“开始”以提供在拓扑中呈现的样本。在该实例中，定序器源 122 还在媒体源 210(1)、210(2)上调用“开始”，然后向媒体会话 214 返回经集聚和加以时戳的样本。因而，在该实例中，媒体会话 214 并不“觉察” 定序器源 122 在提供来自多个其它媒体源的样本。在讨论了可使用基础结构处理的各种示例性媒体时间线之后，对媒体时间线 120 再现的进一步讨论可相关于图 7 进行。

媒体时间线

图 4 是媒体时间线 400 被视为包括描述媒体输出以供呈现的多个节点的树的一示例性实现的示图。可对应于或可不对应于图 1 和 2 的媒体时间线 120 的该媒体时间线 400 被构建为包括多个节点 402-412 的树。多个节点 402-412 各自包括相应的元数据 412-422，这些元数据描述节点和/或该特定节点的“子节点”的各个属性和行为。例如，节点 404 和节点 406 被分别安排为“父”和“子”。节点 404 包括描述该节点 404 的行为和属性的元数据 416。元数据 416 也可描述各个“子”节点 406、408，诸如节点 406、408 的再现顺序。

在一实现中，媒体时间线 400 本身不可执行以作出有关用户界面（UI）、回放或编辑的决定。相反，媒体时间线 400 上的元数据 414-424 由应用程序 202 解释。例如，媒体时间线 400 可包括定义时间线所引用媒体的呈现的一种或多种专用技术。应用程序 202 可被配置成使用这些专用技术来确定媒体的“回放顺序”，其进

LINKPLAY EXHIBIT 1002
Page 217 of 1292

一步讨论可相关于图 7-11 进行。

定位于媒体时间线 400 上的节点 402-412 描述了媒体时间线 400 的基本布局。该布局可用来显示时间线结构。例如，可提供各类节点 402-412 从而实现期望布局。该节点类型指明如何解释该节点的子节点，诸如根节点 402 和叶节点 408-412。在本实例中根节点 402 指定用于再现元数据时间线 400 的起始点，并包括描述如何启动再现的元数据 414。

在图 4 的所示实现中，媒体时间线 120 的叶节点 408、410、412 直接映射到媒体。例如，叶节点 408、410、412 可具有描述如何检索各叶节点 408-412 所代表的媒体的相应元数据 420、422、424。叶节点可指定音频和/或视频文件的路径、指向在再现媒体时间线 400 期间通过编程生成视频帧的组件等等。例如，叶节点 408 包括具有映射到被配置为话筒的输入设备 108(1)的指针 426 的元数据 420。叶节点 410 包括具有映射到媒体 430 的地址的指针 428 的元数据 422，该媒体 430 处于本地地包括在图 1 计算机 102 上本地的存储设备 432 中。叶节点 412 包括具有映射到网络 112 上远程计算机 114 的网络地址的指针 434 的元数据 424。该远程计算机 114 包括摄影机 116，以经由网络 112 向图 1 的计算机 102 提供媒体。因而，在该实现中，时间线 400 不包括真正的媒体，而是通过使用描述在何处和/或如何定位所引用媒体的指针 426、428、434 来引用媒体。

节点 404、406 也可描述媒体时间线 400 的附加节点。例如，节点 404 可用来描述节点 406、408 的执行顺序。换言之，节点 404 用作“结型”节点以提供其“子节点”的排序和进一步描述。有可用于媒体时间线 400 的各种“结型”节点，诸如顺序节点和并行节点。图 5-6 描述顺序和并行节点之后的示例性语义。

图 5 是其中示出顺序节点 502 和作为该顺序节点 502 的子节点的多个叶节点 504、506、508 的一示例性实现 500 的示图。该顺序节点 502 的子节点一个接一个地再现。此外，顺序节点 502 可包括描述多个叶节点 504-508 的再现顺序的元数据 510。如图所示，首先再现叶节点 504，然后再现叶节点 506，接着再现叶节点 508。每个叶节点 504-508 包括具有指向相应媒体 524、526、528 的相应指针 518、520、522 的相应元数据 512、514、516。因而，顺序节点 502 可表示线性文件列表的功能。

尽管顺序节点 502 的子节点在本实现中被配置为叶节点，但顺序节点 502 的子节点可表示任何其它类型的节点。例如，子节点可用来提供如图 4 所示的复杂树形结构。例如，图 4 的节点 406 是另一结型节点，即节点 404 的子节点。

LINKPLAY EXHIBIT 1002
Page 218 of 1292

图 6 是其中并行节点 602 包括指定示出作为并行节点 602 的子节点的多个叶节点 606、608 的元数据 604 的一示例性实现 600 的示图。在相关于图 5 所述的前面实现中讨论了顺序节点，其中一个接一个地再现作为顺序节点的子节点的节点。为了同时提供节点的再现，可采用并行节点 602。

并行节点 602 的子节点可同时再现。例如，叶节点 606 和叶节点 608 是并行节点 602 的子节点。各个叶节点 606、608 包括具有指向相应媒体 618、620 的相应指针 614、616 的相应元数据 610、612。各个叶节点 606、608 包括在指定何时再现相应叶节点 606、608 的相应元数据 610、612 中所包括的相应时间 622、624。叶节点 606、608 上的时间 622、624 与并行节点 602 即父节点相关。各个子节点可表示任何其它类型的节点和节点组合，从而提供具有组合功能的复杂树形结构。例如，“结型”节点也可引用媒体等。尽管已描述了包括时间数据的元数据，但各种元数据可被包括在媒体时间线的节点上，其一个示例在以下实现中描述。

尽管媒体时间线的一些示例已相关于图 4-6 进行了描述，但可使用所述基础结构处理各种其它媒体时间线而不背离本发明精神和范围。

示例性过程

以下讨论描述可使用前述系统和设备实现的处理技术。每个过程的各方面可用硬件、固件、或软件、或其组合来实现。这些过程被示为指定由一个或多个设备执行的操作的一组框，并且不必限于由相应框示出的执行操作的顺序。在以下讨论的各个部分中，将参考图 1-6 的环境、系统和时间线。

图 7 是示出其中应用程序与媒体会话和定序器源交互以使配置为播放列表的媒体时间线得以再现的一示例性实现中的过程 700 的流程图。一应用程序创建定序器源（框 702）和媒体会话（框 704）。例如，该应用程序可对媒体基础 204 的 API 作出“创建”调用。

应用程序对媒体时间线的每个片段创建一部分拓扑（框 706）。例如，在该实现中媒体时间线被配置为播放列表，它可由图 5 的包括顺序节点 502 和多个叶节点 504-508 的媒体时间线 500 表示。如前所述，每个叶节点 504、506、508 包括引用相应媒体项 524、526、528 的相应指针 518、520、522。

应用程序然后对媒体时间线的顺序节点的一个或多个叶节点创建一个部分拓扑（框 706）。例如，在该实施例中，媒体时间线 120 是引用要按顺序播放（一个媒体项接另一个媒体项）的媒体的播放列表。因此，每个叶节点是表示用于回放媒体时间线的部分拓扑的媒体时间线 120。在另一示例中，如果时间线指定两个叶节

LINKPLAY EXHIBIT 1002
Page 219 of 1292

点之间的匀滑转换，则将存在这样的拓扑，其中在匀滑转换期间使用两个叶节点的拓扑。在第一示例中，可对叶节点的小段持续时间指定效果。例如，如果叶节点表示 10 秒长的媒体并且时间线指定该叶节点的最后 5 秒的淡出效果，则这将导致两个拓扑，第一个不包括该效果而第二个包括该效果。

应用程序使这些拓扑在定序器源上排队（框 708），且最后一个拓扑被标记为“结束”（框 710）。例如，标记可被设置在最后一个拓扑上使得该定序器源在再现该“带标记”拓扑之后结束回放。

然后从定序器源创建呈现描述符（框 712）。该呈现描述符描述将要再现的媒体流对象（下文中称为“媒体流”）。如前所述，媒体流是产生/接收媒体样本的对象。媒体源对象可产生一个或多个媒体流。因此，呈现描述符可描述这些流的性质，诸如各个流的位置、格式等。

然后应用程序从定序器源获得与呈现描述符相对应的拓扑（框 714）。例如，应用程序可将该呈现描述符传送给定序器源，并接收与呈现描述符相对应的拓扑。在另一示例中，定序器源可在媒体会话上“设置”拓扑。此外，所获拓扑可用各种方法配置。例如，所获拓扑可以是通过图 2 的拓扑载入器 232 解析成全拓扑的部分拓扑。在又一示例中，定序器源 122 可结合拓扑载入器的功能以将部分拓扑解析成之后将由媒体会话 214 获得的全拓扑。也可预期各种其它示例。

然后在媒体会话上设置拓扑（框 716）。例如，媒体会话 214 可包括拓扑队列，从而各拓扑可依次一个接一个地再现，而不会在拓扑再现之间遇到“间隙”。因此，应用程序可调用媒体会话来“设置”排队拓扑中要再现的第一个，并调用媒体会话上的“开始”来开始再现（框 718）。

在再现期间，应用程序可“收听”媒体会话事件（框 720）。例如，应用程序 202 可从媒体会话 214 接收状态事件，如图 3 的箭头 304 所示。应用程序然后可确定是否接收到了“新拓扑”事件（判定框 722）。若否（从判定框得到“no”），则该应用程序可继续“收听”该事件。

当接收到“新拓扑事件”（从判定框得到“yes”），则对新拓扑获得呈现描述符（框 724）。获得来自定序器源的与呈现描述符相对应的拓扑（框 714），并且对新拓扑重复过程 700 的一部分（框 714、716、720-724）。这样，应用程序 202、定序器源 122 和媒体会话 214 可提供播放列表的顺序回放。然而，在一些实例中，描述了涉及多个媒体源和复杂拓扑的并行再现。在这样的一个实例中可采用类似的功能，其进一步讨论可相关于以下附图进行。

LINKPLAY EXHIBIT 1002
Page 220 of 1292

图 8 是示出在指定时段上第一和第二媒体的输出 800 的一示例性实现的示图，该输出利用在第一和第二媒体之间转换的效果。在所示示例中，A1.asf 802 和 A2.asf 804 是两个不同的音频文件。A1.asf 802 的输出长度为 20 秒，而 A2.asf 804 的输出长度也为 20 秒。匀滑转换效果 806 在 A1.asf 802 和 A2.asf 804 之间定义。换言之，匀滑转换 806 被定义为从 A1.asf 802 的输出转换到 A2.asf 804 的输出。匀滑转换效果 806 在 10 秒时开始进入 A1.asf 802 的输出，并在 A1.asf 802 的输出结束时终止。因此，A2.asf 804 的输出也在 10 秒时开始。匀滑转换 806 被示为输入两个不同的媒体，即 A1.asf 802 和 A2.asf 804，并提供具有预期效果的单一输出。

图 9 是适于实现图 8 的匀滑转换效果 806 的一示例性实现的媒体时间线 900 的示图。媒体时间线 900 包括一具有两个子节点，即叶节点 904、906 的并行节点 902。该并行节点 902 包括指定 0 秒的起始时间 908 和 20 秒的停止时间 910 的元数据。并行节点 902 还包括描述匀滑转换的组合效果 912。叶节点 904 包括指定 0 秒的起始时间 914 和 20 秒的停止时间 916 的元数据。叶节点 906 包括具有 10 秒的起始时间 918 和 30 秒的停止时间 920 的元数据。

叶节点 904 还包括引用相关于图 8 描述的 A1.asf 802 文件的指针 922。类似地，叶节点 906 包括引用相关于图 8 描述的 A2.asf 804 文件的指针 924。因而，当执行媒体时间线 900 时，A1.asf 802 文件和 A2.asf 804 文件以采用如图 8 所示的效果 912 的方式输出。

为了播放（即再现）图 9 的媒体时间线 900，应用程序 202 导出多个片段，在此期间在片段持续期间再现的分量不作改变，即每个分量在片段持续期间再现且在该片段持续期间不添加或去除分量。图 9 的媒体时间线 900 的片段示例在以下附图中示出。

图 10 是示出由应用程序从图 9 的媒体时间线 900 中导出的、供媒体时间线处理基础结构再现的多个片段的一示例性实现 1000 的示图。如前所述，该应用程序可将媒体时间线 900 分割成多个拓扑，以供媒体时间线处理基础结构再现。在一实现中，每个片段描述其分量的再现不在该片段持续时间改变的拓扑。

例如，图 9 的媒体时间线 900 可被分成多个片段 1002、1004、1006。片段 1002 指定在从“0”到“10”的时段之间音频文件 A1.asf 802 被再现给媒体信宿 1008。片段 1004 描述将匀滑转换效果 806 施加到在从“10”到“20”的时段期间发生的在音频文件 A1.asf 802 和音频文件 A2.asf 804 的输出之间的转换。因此，在片段 1004 中示出的拓扑将来自音频文件 A1.asf 802 的输出和来自音频文件 A2.asf 804 的输出

LINKPLAY EXHIBIT 1002
Page 221 of 1292

示为提供给匀滑转换效果 806，然后其输出被提供给媒体信宿 1008。片段 1006 描述在从“20”到“30”的时段期间音频文件 A2.asf 804 的再现（即播放）。为了播放图 9 的媒体时间线 900，应用程序 202 使在片段 1002-1006 中示出的拓扑排队以由媒体会话 214 再现，其进一步的讨论可相关于以下示例性过程进行。

图 11 是示出应用程序将媒体时间线分割成多个拓扑以供媒体时间线处理基础结构再现的一示例性实现中的过程 1100 的流程图。应用程序接收一再现媒体时间线的请求（框 1102）。例如，应用程序可被配置为媒体播放器。该媒体播放器可输出具有多个供用户选择的播放列表的用户界面（例如图形用户界面）。因此，用户可与用户界面交互以选择多个播放列表中要由应用程序输出的一个。

然后应用程序从媒体时间线中导出多个片段（框 1104）。例如，应用程序可确定在再现媒体时间线达一特定持续时间期间利用哪些分量。然后该应用程序确定该持续时间的引用在片段持续时间不作改变（即在该片段期间不添加或去除媒体项）的媒体项的片段。

一旦已分割了媒体时间线，应用程序就可构建描述多个片段的数据结构（框 1106）。例如，该应用程序可将图 9 的媒体时间线 900 分割成图 10 的多个片段 1002-1006。这多个片段各自包括用来再现该片段的引用媒体的若干分量的一个拓扑。因此，这些拓扑的每一个可被输入引用再现该媒体所需分量并描述这些分量之间交互的数据结构（例如数组）。例如，片段 1004 描述一个拓扑，它将来自音频文件 A1.asf 802 的输出和来自音频文件 A2.asf 804 的输出定义为提供给匀滑转换效果 806，然后其输出被提供给媒体信宿 1008。也可预期各种其它示例。

然后应用程序经由应用程序编程界面（API）将该数据结构传递给定序器源（框 1108）。如前相关于图 7 所述，应用程序然后从定序器源获得与呈现描述符相对应的拓扑（框 1110）。例如，应用程序可将该呈现描述符传送给定序器源，并接收与该呈现描述符相对应的拓扑。在另一示例中，定序器源可在媒体会话上“设置”该拓扑。此外，所获拓扑能以各种方式配置。例如，所获拓扑可以是由图 2 的拓扑载入器 232 解析成全拓扑的部分拓扑。在又一示例中，定序器源 122 可结合拓扑载入器的功能以将部分拓扑解析成之后将由媒体会话 214 获得的全拓扑。也可预期各种其它示例。

然后在媒体会话上设置该拓扑（框 1112）。例如，媒体会话 214 可包括拓扑队列，从而各拓扑可依次一个接一个地再现，而不会在拓扑再现之间遇到“间隙”。因此，应用程序可调用媒体会话来“设置”排队拓扑中要再现的第一个，并调用媒

LINKPLAY EXHIBIT 1002
Page 222 of 1292

体会话上的“开始”来开始再现（框 1114）。

在再现期间，应用程序可“收听”媒体会话事件（框 1116）。例如，应用程序 202 可从媒体会话 214 接收状态事件，如图 3 的箭头 304 所示。应用程序然后可确定是否接收到了“新拓扑”事件（判定框 1118）。如果没有收到（来自判定框 1118 的“否”），则应用程序可继续“收听”事件。如果有收到（来自判定框 1118 的“是”），则获得新拓扑的新呈现描述符（框 1120）并重复过程 1100 的一部分。

各个媒体时间线可由媒体时间线处理基础结构再现。例如，媒体时间线可以是“基于事件”的，从而作者可基于一事件来指定媒体的开始。例如，在时间“中午 12 点”开始播放音频文件“A1.asf”。这些对象模式可在回放期间使媒体在定序器源上排队，并可删除或更新如前所述已经排队的拓扑。

示例性操作环境

本文中所述的各个组件和功能可用许多单个计算机实现。图 12 示出计算机环境 1200 的一典型示例的各个组件，包括由参考标号 1202 标示的计算机。计算机 1202 可与图 1 的计算机 102 相同或不同。图 12 所示的组件仅仅是示例，并且并不旨在对本发明的功能范围提出任何限制；本发明并非必然依赖于图 12 所示的功能部件。

通常，可使用各种不同的通用或专用计算系统配置。适于本发明使用的众所周知的计算系统、环境、和/或配置的示例包括，但不限于，个人计算机、服务器计算机、手持式或膝上型装置、多处理器系统、基于微处理器的系统、机顶盒、可编程消费品电器、网络 PC、可用网络设备、小型计算机、大型机、包括任一种以上系统或设备的分布式计算环境等等。

这些计算机的功能在许多情形中由计算机可执行指令，诸如由计算机执行的软件组件实施。一般而言，软件组件包括执行具体任务或实现具体抽象数据类型的例程、程序、对象、组件、数据结构等等。任务也可由经通信网络链接的远程处理装置执行。在分布式计算环境中，软件组件可置于本地和远程计算机存储介质中。

指令和/或软件组件在不同时间被存储在作为计算机的一部分或可由计算机读取的各种计算机可读介质中。程序通常分布在例如软盘、CD-ROM、DVD、或某些形式的诸如经调制信号的通信介质上。它们从那里被安装或载入到计算机的辅助存储器中。在执行时，它们至少部分地载入计算机的主要电子存储器中。

为说明起见，程序和诸如操作系统的其它可执行程序组件在本文中被示为分立块，尽管可以理解这些程序和组件在各个时间驻留在计算机的不同存储组件中，

LINKPLAY EXHIBIT 1002
Page 223 of 1292

并由计算机的数据处理器执行。

参照图 12，计算机 1202 的组件可包括，但不限于，处理单元 1204、系统存储器 1206、以及将包括系统存储器在内的各种系统组件耦合到处理单元 1204 的系统总线 1208。系统总线 1208 可以是若干总线结构类型中的任何一种，包括存储器总线或存储器控制器、外围总线、以及使用各种总线架构的任一种的局部总线。作为示例，而非限制，这些架构包括工业标准架构（ISA）总线、微信道架构（MCA）总线、增强型 ISA（EISA）总线、视频电子技术标准协会（VESA）局域总线、以及也称为 Mezzanine 总线的外围部件互连（PCI）总线。

计算机 1202 通常包括各种计算机可读介质。计算机可读介质可以是能被计算机 1202 访问的任何可用介质，并包括易失性和非易失性介质、可移动和不可移动介质。作为示例，而非限制，计算机可读介质可包括计算机存储介质和通信介质。“计算机存储介质”包括以任何方法或技术实现、用于存储诸如计算机可读指令、数据结构、软件组件或其它数据等信息的易失性和非易失性介质、可移动和不可移动介质。计算机存储介质包括但不限于 RAM、ROM、EEPROM、闪存或其它存储器技术、CD-ROM、数字化多功能光盘（DVD）或其它光盘存储、磁盒、磁带、磁盘存储或其它磁性存储设备、或任何其它可用于存储所需信息并可由计算机 1202 访问的介质。通信介质通常具体化为诸如载波或其它传输机制的已调制数据信号中的计算机可读指令、数据结构、软件组件、或其它数据，且包括任何信息输送介质。术语“已调制数据信号”意指在信号中用对信息编码的方式设置或改变其一个或多个特征的信号。作为示例，而非限制，通信介质包括诸如有线网络或直线连接的有线介质，和诸如声学、射频、红外线和其它无线介质的无线介质。以上任何介质的组合也应包括在计算机可读介质的范围中。

系统存储器 1206 包括诸如只读存储器（ROM）1210 和随机存取存储器（RAM）1212 的易失性和/或非易失性存储器形式的计算机存储介质。包含有助于如起动时在计算机 1202 的元件间传送信息的基本例程的基本输入/输出系统（BIOS）1214 通常存储在 ROM 1210 中。RAM 1212 通常包含可被处理单元 1204 即时访问和/或当时正被操作的数据和/或软件组件。作为示例，而非限制，图 12 示出了操作系统 1216、应用程序 1218、软件组件 1220、和程序数据 1222。

计算机 1202 还可包括其它可移动/不可移动、易失性/非易失性计算机存储介质。作为示例，图 12 图示了读取或写入不可移动、非易失性磁性介质的硬盘驱动器 1224，读取或写入可移动、非易失性磁盘 1228 的磁盘驱动器 1226，读取和写入

LINKPLAY EXHIBIT 1002
Page 224 of 1292

可移动、非易失性光盘 1232，诸如 CD-ROM 或其它光学介质的光盘驱动器 1230。其它能用在示例性操作环境中的可移动/不可移动、易失性/非易失性计算机存储介质包括，但不限于，如磁带盒、闪存卡、数字化多功能盘、数字化录像带、固态 RAM、固态 ROM 等等。硬盘驱动器 1224 通常通过诸如数据介质接口 1234 的不可移动存储器接口与系统总线 1208 连接，而磁盘驱动器 1226 和光盘驱动器 1230 通常通过可移动存储器接口与系统总线 1208 连接。

如上所述并如图 12 所示的驱动器及其相关联的计算机存储介质为计算机 1202 提供计算机可读指令、数据结构、软件组件、和其它数据的存储。在图 12 中，例如，硬盘驱动器 1224 被示为存储操作系统 1216'、应用程序 1218'、软件组件 1220'、和程序数据 1222'。注意这些组件可以与操作系统 1216、应用程序 1218、其它软件组件 1220、和程序数据 1222 相同或不同。在此给予操作系统 1216'、应用程序 1218'、软件组件 1220'、和程序数据 1222'的数字不同至少说明它们是不同的副本。用户可通过输入装置如键盘 1236、通常是指鼠标、跟踪球或触摸板等的定位装置（未示出）向计算机 1202 输入命令和信息。其它输入装置（未示出）可包括源外围设备（诸如提供流式数据的话筒 1238 或相机 1240）、游戏杆、游戏垫、卫星接收器、扫描仪等等。这些和其它输入设备常常通过与系统总线耦合的输入/输出（I/O）接口 1242 与处理单元 1204 相连，但也可通过诸如并行端口、游戏端口或通用串行总线（USB）的其它接口和总线结构连接。监视器 1244 或其它类型的显示设备也可通过诸如视频适配器 1246 的接口与系统总线 1208 相连。除了监视器 1244 之外，计算机还可包括其它外围再现设备（例如扬声器）和一个或多个打印机，它们可通过 I/O 接口 1242 相连。

该计算机可在使用与一台或多台远程计算机，诸如远程设备 1250 的逻辑连接的网络化环境中运行。该远程设备 1250 可以是个人计算机、可用网络设备、服务器、路由器、网络 PC、对等装置或其它公共网络节点，而且通常包括上述与计算机 1202 相关的许多或全部组件。图 12 中所描绘的逻辑连接包括局域网(LAN) 1252 和广域网(WAN) 1254。尽管图 12 所示的 WAN 1254 是因特网，但 WAN 1254 也可包括其它网络。这样的网络化环境在办公室、企业范围计算机网络和内联网上是常见的。

当用于 LAN 网络化环境中时，计算机 1202 通过网络接口或适配器 1256 与局域网 1252 连接。当用于 WAN 网络化环境中时，计算机 1202 通常包括调制解调器 1258 或其它用于在因特网 1254 上建立通信的装置。可以是内置式或外置式的调制

LINKPLAY EXHIBIT 1002
Page 225 of 1292

解调器 1258 与系统总线 1208 通过 I/O 接口 1242 或其它适当机制连接。在网络化环境中，所示与计算机 1202 相关的程序模块或其一部分可存储在远程设备 1250 中。作为示例，而非限制，图 12 示出了驻留于远程设备 1250 中的远程软件组件 1260。应当理解，所示网络连接是示例性的，并且也可使用其它用于在计算机间建立通信链接的手段。

如前所述，应用程序 1218、1218'也可提供媒体时间线以供图 2 的媒体基础 204 再现。媒体时间线的示例性实现可相关于以下附图进行。

示例性媒体时间线实现

先前所述的媒体时间线可采用各种存储和恢复诸如 Windows®媒体播放器播放列表文件、可执行时间语言（XTL）文件等的一个或多个时间线数据的方法。

例如，媒体时间线可被描述为以下由 ASX 文件扩展名标识的 Windows®媒体播放器播放列表文件。

```
<Asx Version = "3.0" >
<Entry>
<Ref href = "file://\\wmp\content\mpeg\Boom.mpe"/>
</Entry>
<Entry>
<Ref href = "\\wmp\content\Formats\MovieFile\chimp.mpg"/>
</Entry>
<Entry>
<Ref href = "file://\\wmp\content\mpeg\Boom.mpe"/>
</Entry>
</Asx>
```

该 ASX 文件指定紧接着输出的三个文件。对于这些文件未指定起始和停止时间。该 ASX 文件可由图 13 所示的包括一顺序节点 1302 和三个叶节点 1304、1306、1308 的媒体时间线 1300 表示。叶节点 1304-1308 各自包括描述要由媒体时间线 1300 输出的媒体的相应源 1316、1318、1320 的相应元数据 1310、1312、1314。

媒体时间线的另一示例在以下 XTL 文件中示出：

```
<timeline>
<group type="video">
        <track>
<clip src="V1.wmv" start="0" stop="30" mstart="50" mstop="80"
/>
```


LINKPLAY EXHIBIT 1002
Page 226 of 1292

```
<clip src=”V2.wmv” start=”30” stop=”40” mstart=”0” />
                </track>
</group>
<group type="audio">
                <track>
<clip src="A1.asf" start="20" stop="40" mstart="0" />
<clip src=”A2.asf” start=”40” stop=”60” mstart=”0” />
</track>
</group>
</timeline>
```

该 XTL 文件描述用于输出的两个媒体（例如流）的磁轨。磁轨之一为音频磁轨，而另一磁轨为视频磁轨。

该 XTL 文件可由图 14 所示的包括具有两个子顺序节点 1404、1406 的并行节点 1402 的媒体时间线 1400 表示。在本示例中，顺序节点 1404 具有设置为“视频”的主类滤波器 1408，而顺序节点 1406 具有设置为“音频”的主类滤波器 1410。顺序节点 1404 具有两个子叶节点 1412、1414。叶节点 1412 包括指定起始时间 1416 为“0”、停止时间 1418 为“30”、媒体起始 1420 为“50”、以及媒体停止 1422 为“80”的元数据。叶节点 1414 包括指定起始时间 1424 为“30”、停止时间 1426 为“40”、以及媒体起始 1428 为“0”的元数据。应当注意，叶节点 1414 不包括媒体停止时间，因此将输出由叶节点 1414 引用的媒体的总长度。

顺序节点 1406 还具有两个子叶节点 1430、1432。叶节点 1430 包括指定起始时间 1434 为“20”、停止时间 1436 为“40”、以及媒体起始 1438 为“0”的元数据。叶节点 1432 包括指定起始时间 1440 为“40”、停止时间 1442 为“60”、以及媒体起始 1444 为“0”的元数据。

结论

尽管本发明已用专用于结构特征和/或方法动作的语言进行了描述，但可以理解在所附权利要求中定义的本发明并非必须限于所述的具体特征或动作。而是，具体特征和动作被揭示为实现所要求权利的本发明的示例性形式。

LINKPLAY EXHIBIT 1002
Page 227 of 1292

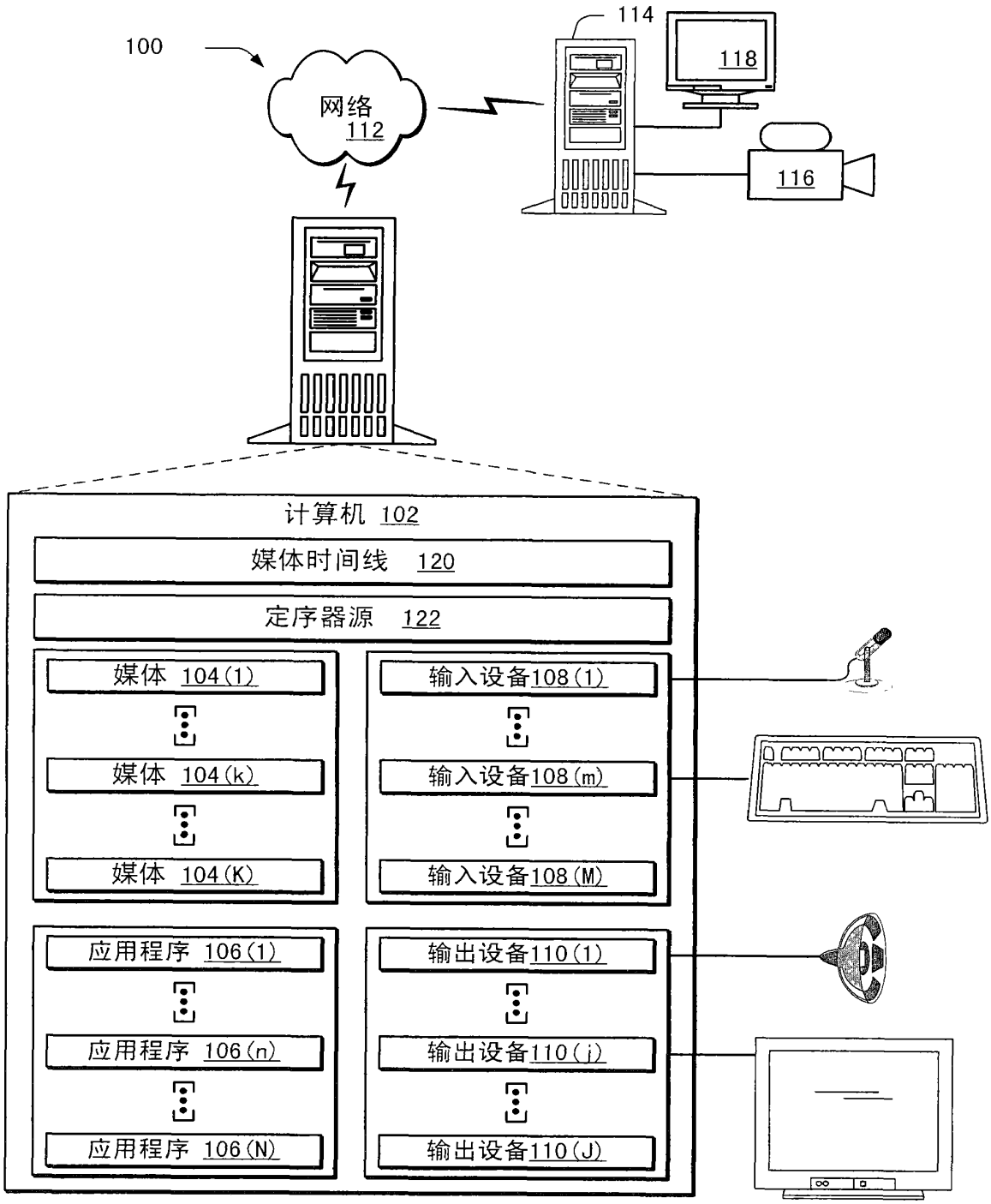


图 1

LINKPLAY EXHIBIT 1002
Page 228 of 1292

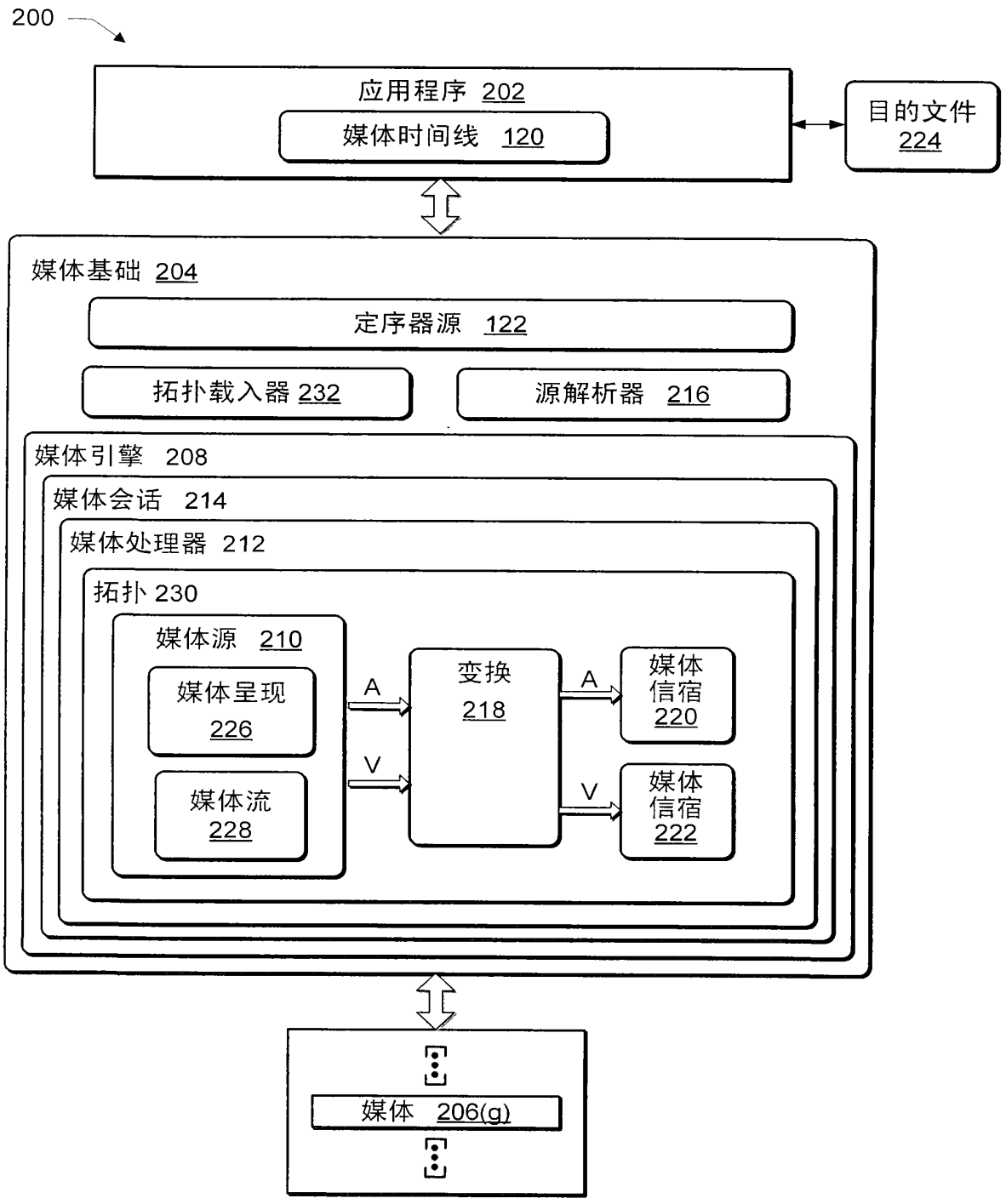


图 2

LINKPLAY EXHIBIT 1002
Page 229 of 1292

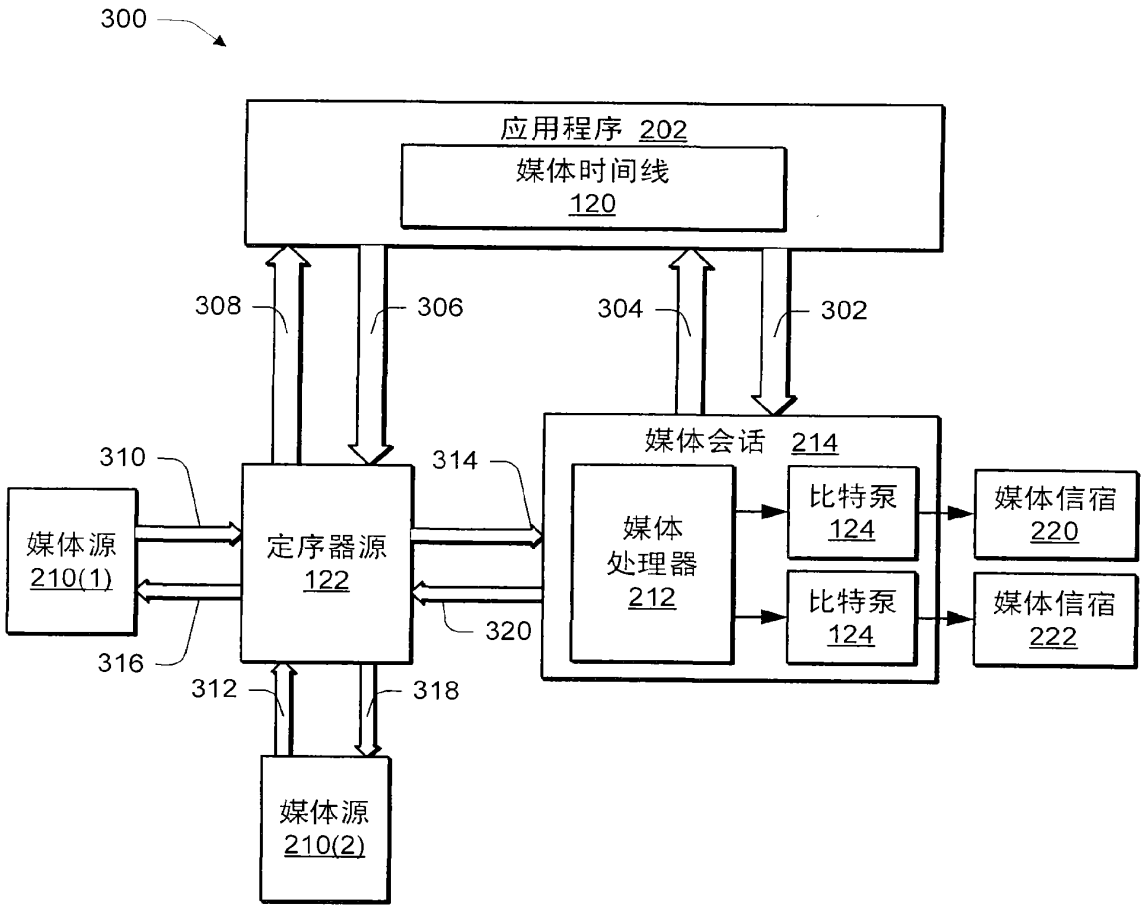


图 3

LINKPLAY EXHIBIT 1002
Page 230 of 1292

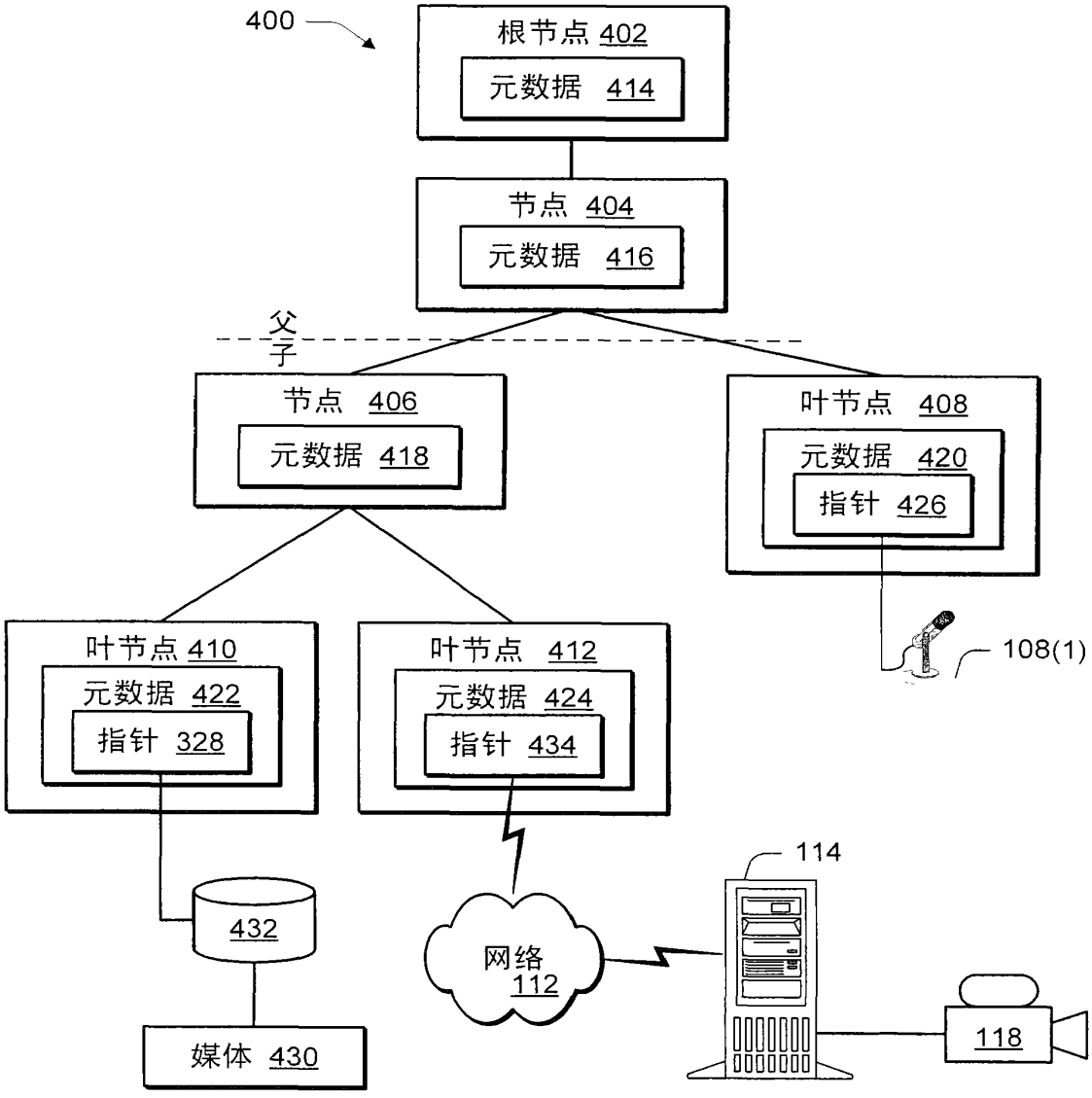


图 4

LINKPLAY EXHIBIT 1002
Page 231 of 1292

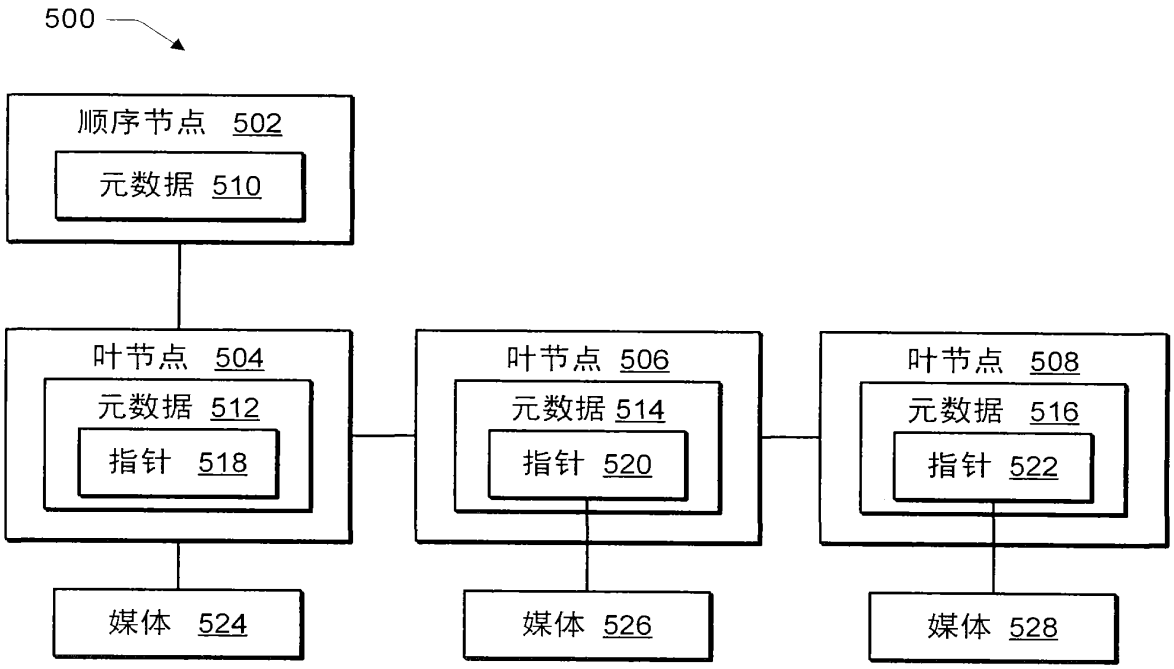


图 5

LINKPLAY EXHIBIT 1002
Page 232 of 1292

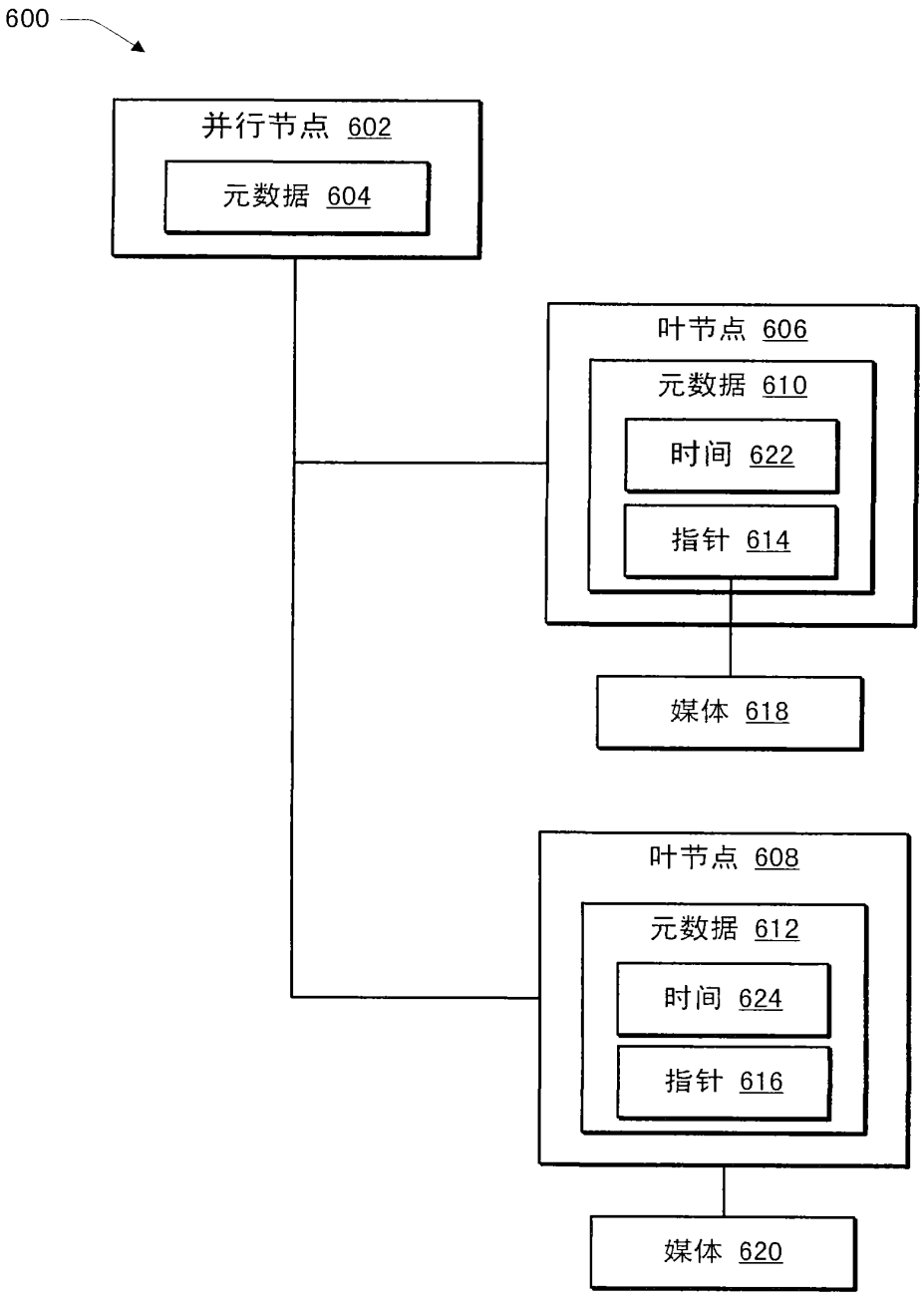


图 6

LINKPLAY EXHIBIT 1002
Page 233 of 1292

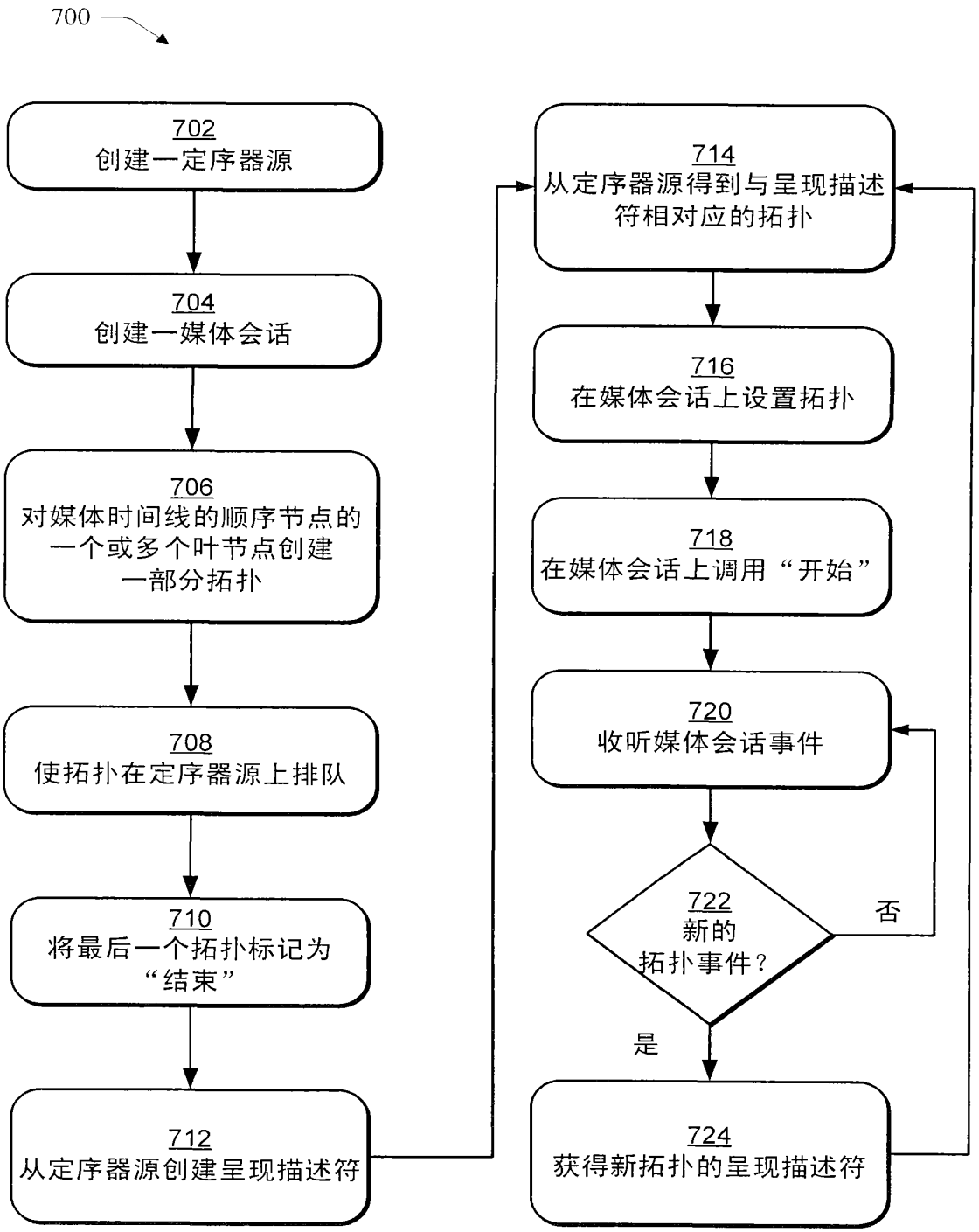


图 7

LINKPLAY EXHIBIT 1002
Page 234 of 1292

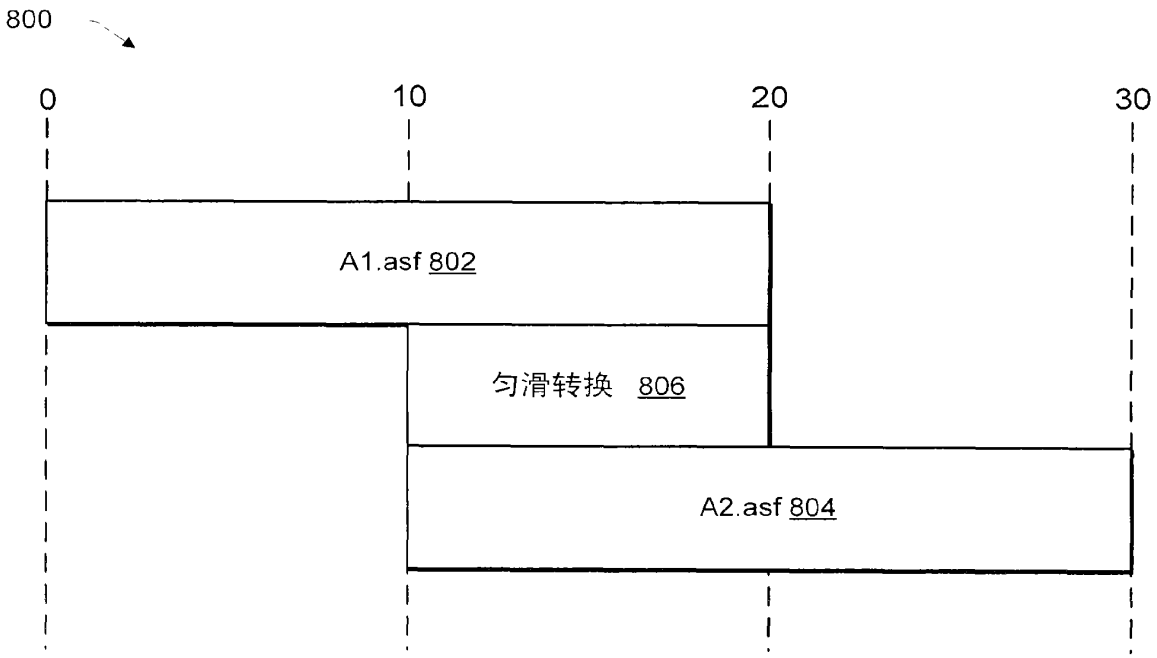


图 8

LINKPLAY EXHIBIT 1002
Page 235 of 1292

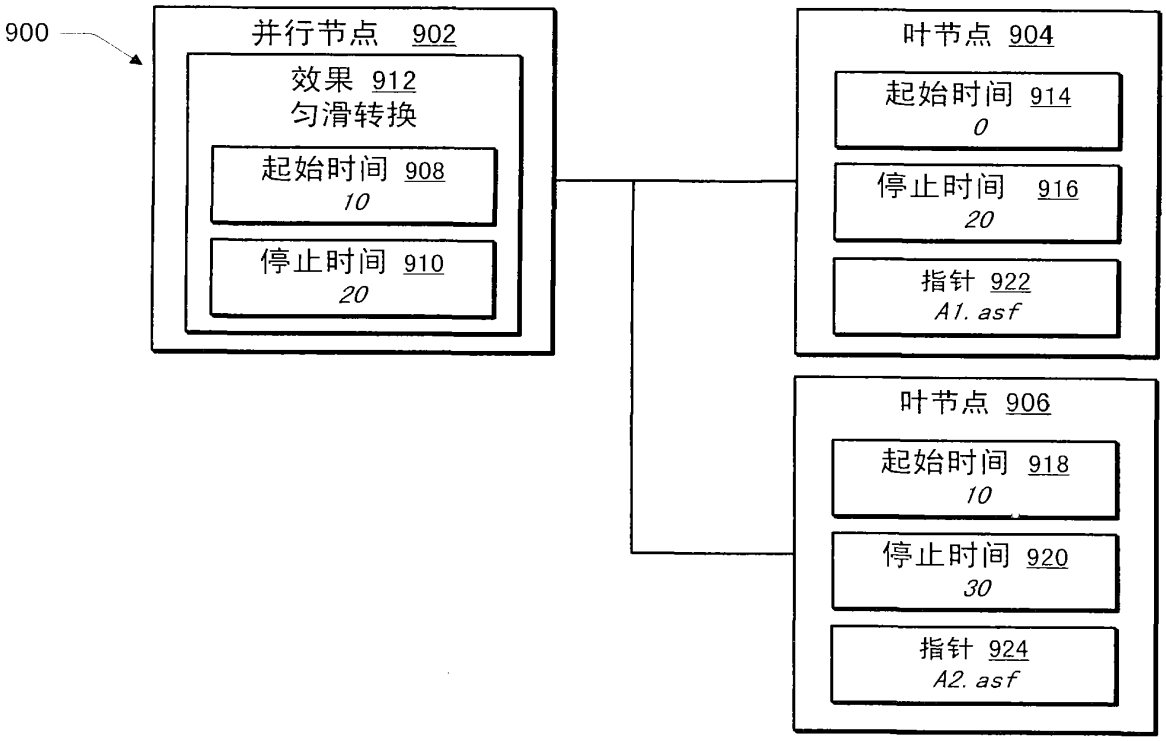


图 9

LINKPLAY EXHIBIT 1002
Page 236 of 1292

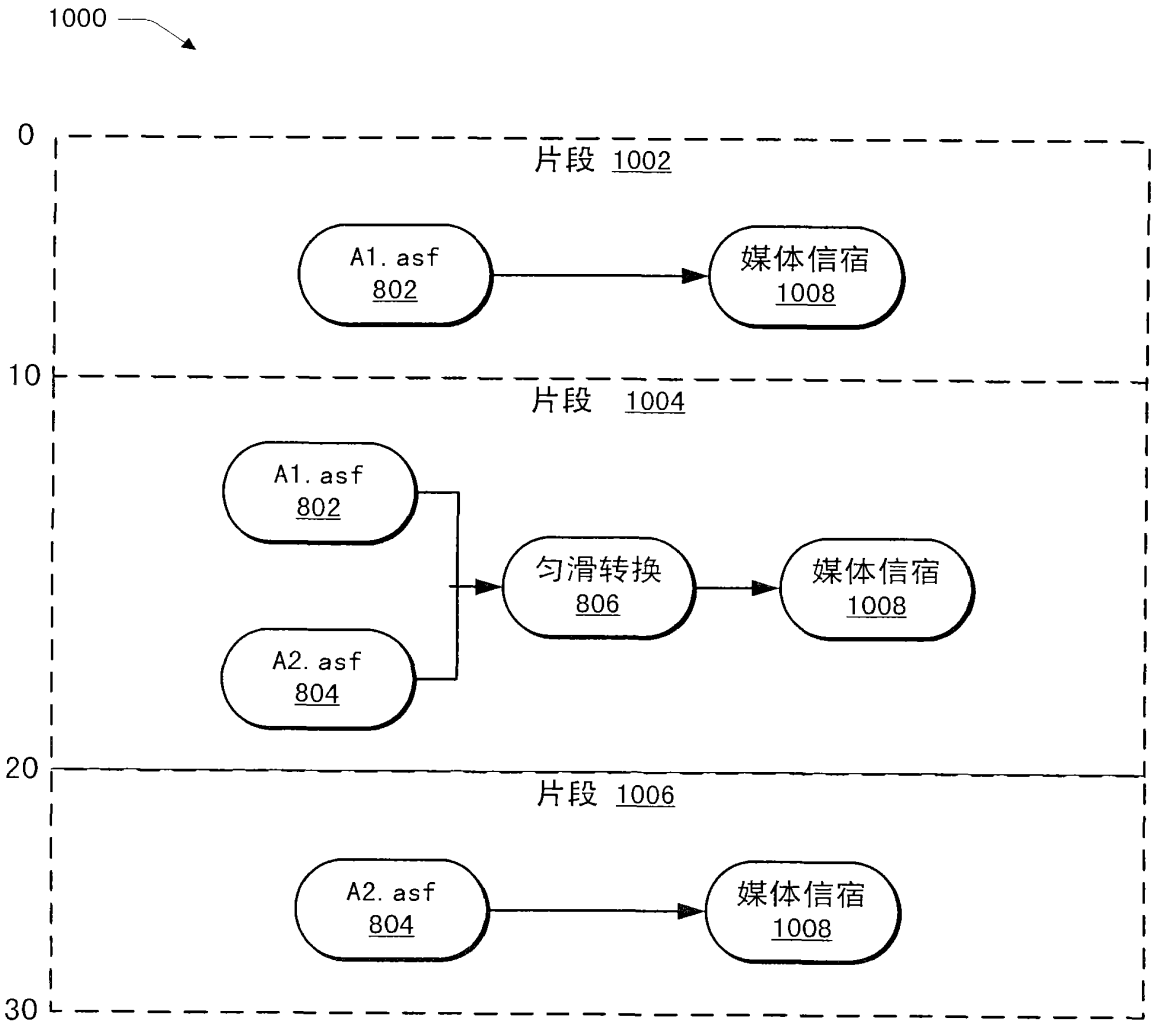


图 10

LINKPLAY EXHIBIT 1002
Page 237 of 1292

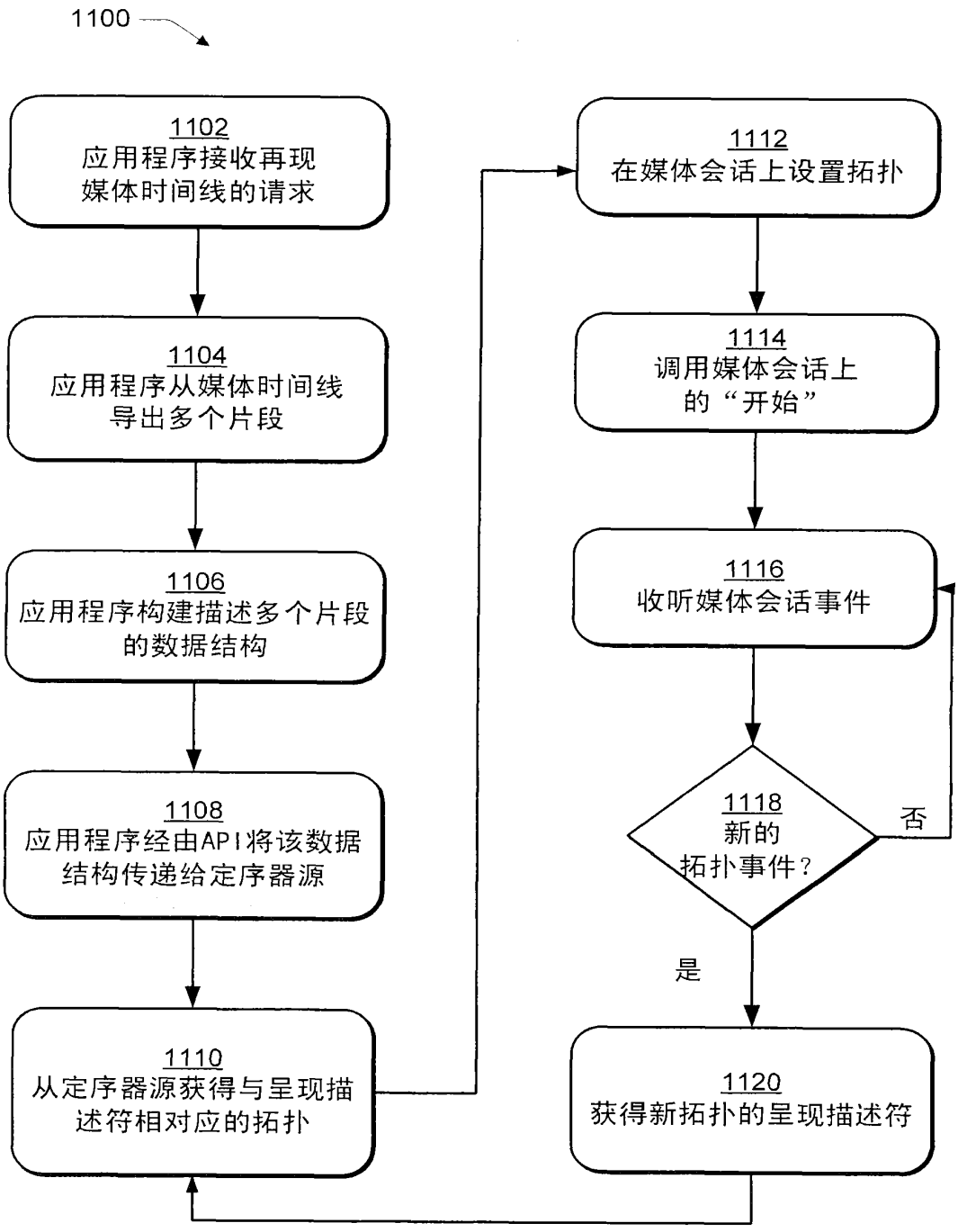


图 11

LINKPLAY EXHIBIT 1002
Page 238 of 1292

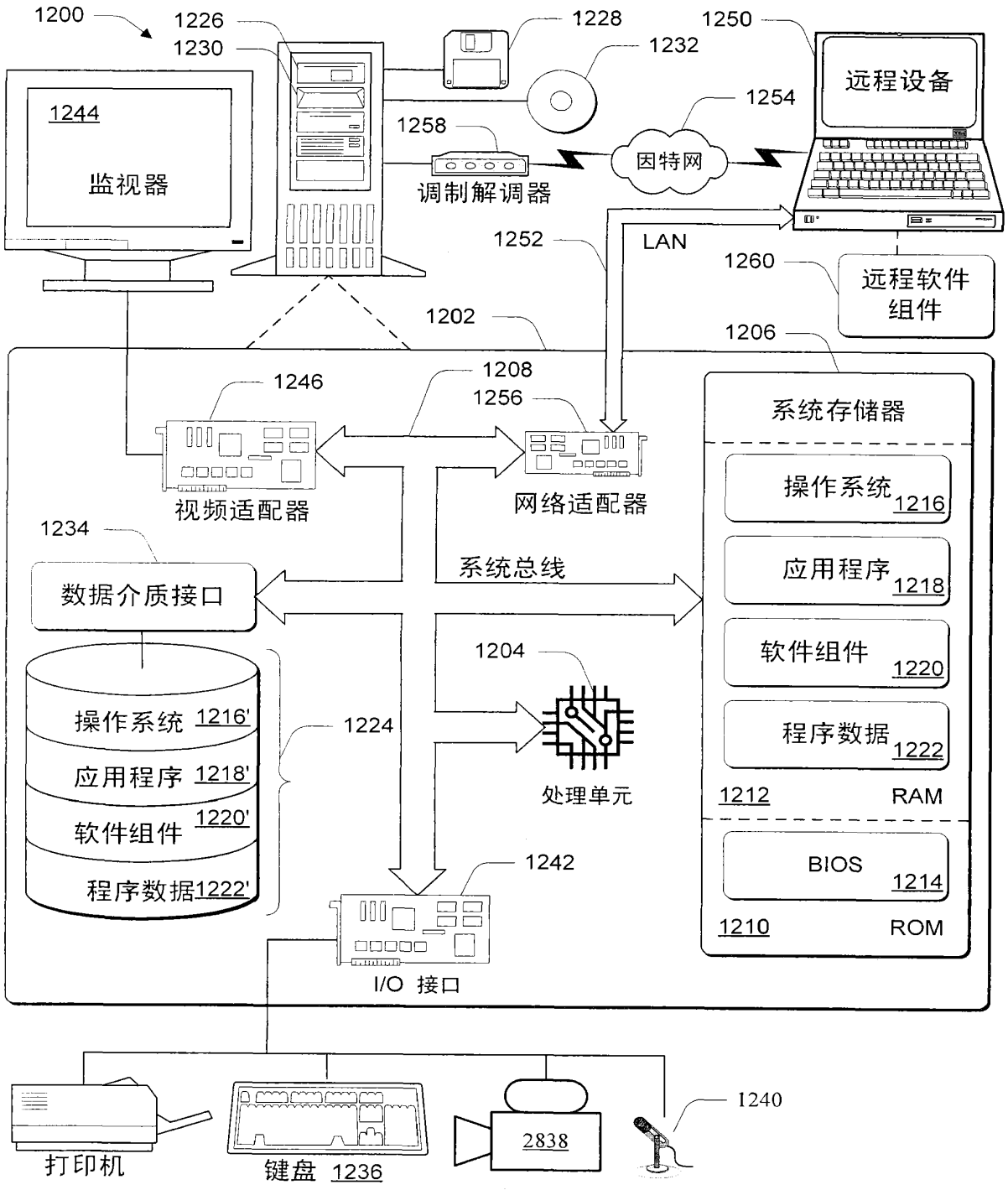


图 12

LINKPLAY EXHIBIT 1002
Page 239 of 1292

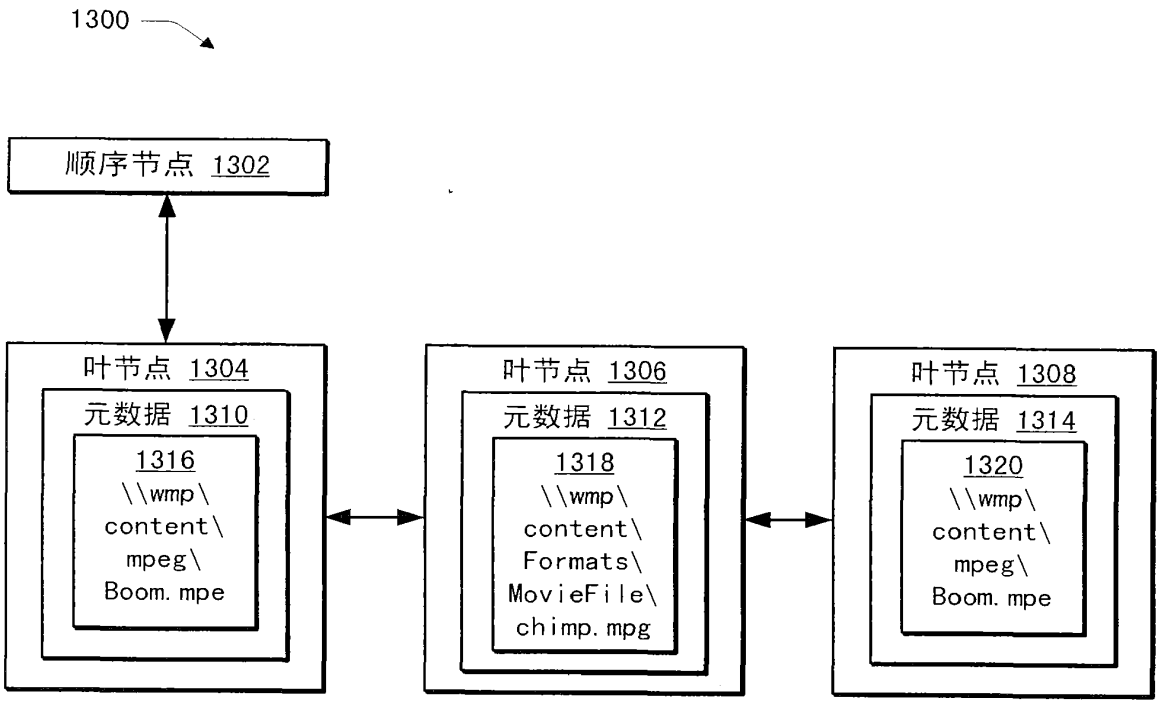


图 13

LINKPLAY EXHIBIT 1002
Page 240 of 1292

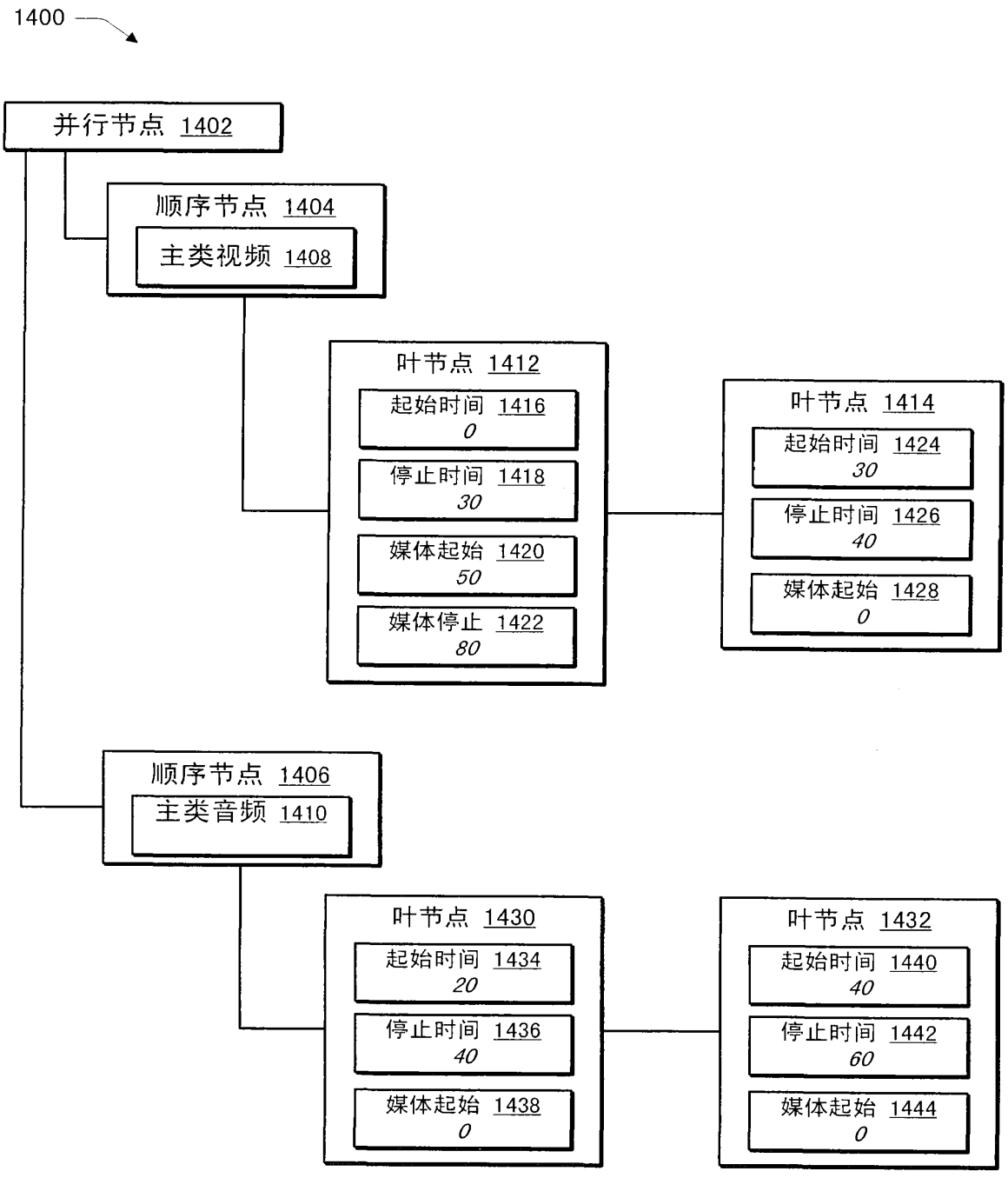


图 14

LINKPLAY EXHIBIT 1002
Page 241 of 1292

Espacenet

Bibliographic data: CN101127987 (A) — 2008-02-20

Audio system employing multiple mobile devices in concert

Inventor(s):

Applicant(s): XEROX CORP [US] ± (XEROX CORP)

Classification: - international: ***H04B5/02; H04Q7/32; H04S7/00***
- cooperative: **H04M1/7253**; H04M1/72558; H04R5/04

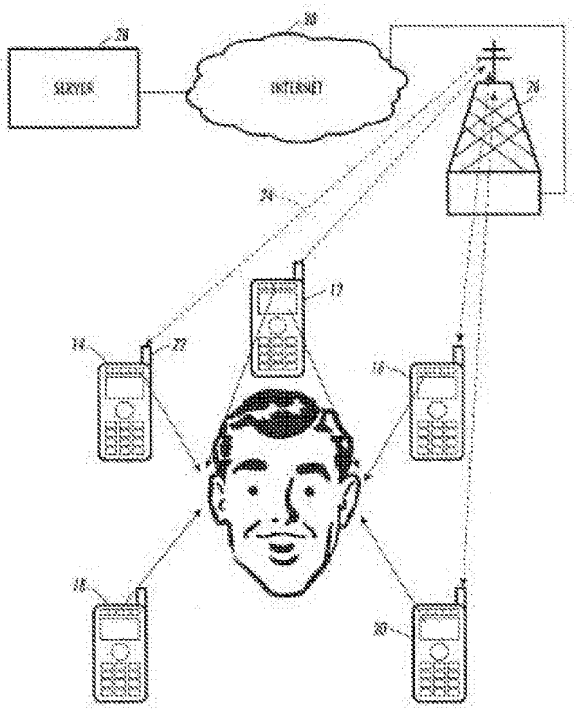
Application number: CN20071141678 20070817

Priority number(s): US20060506365 20060818

Also published as: US2008045140 (A1) US7747338 (B2)

Abstract not available for CN101127987 (A)
Abstract of corresponding document: US2008045140 (A1)

An audio reproduction system includes a plurality of mobile devices, such as mobiles phones. Each of the mobile devices includes a loudspeaker, memory for storing audio data, and instructions, stored in memory, for prompting the plurality of mobile devices to each output at least a portion of an audio data file to the loudspeaker of the respective mobile device. A processor is configured for executing the instructions, thereby enabling contemporaneous play of the audio data file by the plurality of mobile devices.



[19] 中华人民共和国国家知识产权局

[51] Int. Cl.
H04Q 7/32 (2006.01)
H04B 5/02 (2006.01)
H04S 7/00 (2006.01)

[12] 发明专利申请公布说明书

[21] 申请号 200710141678.1

[43] 公开日 2008 年 2 月 20 日

[11] 公开号 CN 101127987A

[22] 申请日 2007.8.17
[21] 申请号 200710141678.1
[30] 优先权
[32] 2006. 8.18 [33] US [31] 11/506365
[71] 申请人 施乐公司
地址 美国康涅狄格州
[72] 发明人 J·V·科尔霍宁

[74] 专利代理机构 中国专利代理(香港)有限公司
代理人 程天正 王小衡

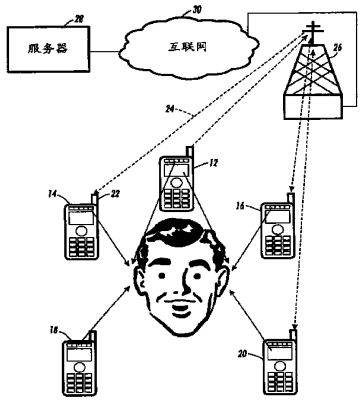
权利要求书 2 页 说明书 11 页 附图 4 页

[54] 发明名称

共同使用多个移动设备的音频系统

[57] 摘要

一种音频再现系统，包括多个移动设备，诸如移动电话。 每个移动设备包括扬声器，用于存储音频文件的存储器，存储在存储器中的指令，用于提示多个移动设备的每个将音频数据文件的至少一部分输出至扬声器。 处理器被配置用于执行指令，由此使由多个移动设备能够同时播放音频数据文件。



1. 一种音频重现系统,包括:

多个移动设备，每个移动设备均包括:

扬声器;

用于存储音频数据的存储器;

指令，存储在存储器中，用于提示多个移动设备均去把音频数据文件的至少一部分输出到该移动设备的扬声器，用以实现由多个移动设备对音频数据文件的同时播放；和

处理器，用于执行指令。

2. 权利要求 1 的系统，其中该指令包括用于将多个移动设备同步以由多个移动设备同步播放该音频数据文件的指令。

3. 权利要求 1 的系统，其中每个移动设备包括无线收发信机，并且该处理器被编程用于使该收发信机用脉冲发送同步脉冲，用以启动由其他移动设备进行的同步播放，并且可被编程用于响应于从另一移动设备接收到的同步脉冲而启动播放。

4. 权利要求 1 的系统，其中该移动设备包括移动电话。

5. 权利要求 1 的系统，其中该音频文件包括多个声道，并且其中该指令包括用于提示第一移动设备播放第一声道且提示第二移动设备播放第二声道的指令。

6. 权利要求 1 的系统，其中所述多个移动设备的至少一个的处理器执行用于向每个移动设备分配频带由此第一移动设备在第一频带播放音频数据且第二移动设备在第二频带播放音频数据的指令，该指令可选地包括用于比较多个移动设备的频率响应并且基于频率响应而分配频带的指令。

7. 权利要求 1 的系统，其中该指令包括用于把同步脉冲从第一移动设备传送到第二移动设备的指令。

8. 权利要求 1 的系统，其中所述移动设备均包含用于短距离无线通信的收发信机，其中该指令包括用于通过短距离无线通信提示多个设备中的其他移动设备的指令。

9. 一种移动设备，包括:

扬声器;

用于存储音频数据文件的存储器；和

LINKPLAY EXHIBIT 1002
Page 244 of 1292

处理器，所述处理器执行用于同步包含该移动设备的多个移动设备并且用于将音频数据文件的至少一部分输出至该扬声器用以由多个移动设备同步播放音该频数据文件的指令。

10. 一种播放音频文件的方法，包括:

将音频文件的至少一部分分配给多个移动设备的每一个;

同步所述移动设备; 和

在已同步的移动设备上同时播放该音频文件所分配的部分，使得在听多个移动设备的听众听到该音频文件。

LINKPLAY EXHIBIT 1002
Page 245 of 1292

共同使用多个移动设备的音频系统

技术领域

示例性的实施例涉及移动通信设备。它与用于再现（render）音频文件的音乐重现（reproduction）系统结合具有特定的应用，所述音频文件使用多个为同时再现音频文件而同步的移动设备。

背景技术

诸如移动电话的用于无线传输和接收语音通信的移动通信设备现在被广泛地使用。这样的设备日益用于存储和重放音频文件(诸如音乐、录音)和带有音频和视频分量这二者的文件(诸如电影)。用户现在能够将音乐和视频文件下载到移动设备中的存储器存储卡中，并且从液晶显示屏上显示的菜单中选择要再现的文件。移动设备典型地具有与该设备相集成在一起的小扬声器。虽然该扬声器对于输出语音通信通常是足够了的，但是再现音频文件的声音质量则趋向于欠佳且仅允许单一声道（单声道）重现。虽然头戴式耳机可以插在该设备中用以听取音频文件，但是这在有若干个人存在时则不方便。

发明内容

根据示例性实施例的一个方面，一种音频重现系统包括多个移动设备。每个移动设备包括扬声器、用于存储音频文件的存储器、存储在存储器中的指令，用于提示多个移动设备均去把音频数据文件的至少一部份输出至该扬声器、以及处理器，用于执行由多个移动设备同时播放音频数据文件的指令。

该指令可以包括用于将多个移动设备同步以由多个移动设备同步播放音频数据文件的指令。

每个移动设备可以包括无线收发信机。该处理器可以被编程用于使该收发信机用脉冲发送同步脉冲，用以启动由其他移动设备进行的同步播放，并且可被编程用于响应于从另一移动设备接收到的同步脉冲而启动播放。

该移动设备可以是移动电话。

该音频文件可以包括多个声道。于是，该指令可以包括用于提示第一移动设备播放第一声道且提示第二移动设备播放第二声道的指令。

LINKPLAY EXHIBIT 1002
Page 246 of 1292

所述多个移动设备的至少一个的处理器可以执行用于向每个移动设备分配频带由此使第一移动设备在第一频带播放音频数据而第二移动设备在第二频带播放音频数据的指令。

该指令还可以包括用于比较多个移动设备的频率响应并且基于频率响应而分配频带的指令。

该音频文件可以包括音乐文件、无线电广播传输和带有音频分量的视频文件中的至少一个。

该指令可以包括用于把同步脉冲从第一移动设备传送到第二移动设备的指令。

该移动设备均可以包含用于短距离无线通信的收发信机。该指令可以包括用于通过短距离无线通信提示多个设备中的其他移动设备的指令。

每个移动设备可以包括基座。该扬声器、存储器和处理器可以与该基座相关联。

在另一个方面，一种移动设备包括扬声器、用于存储音频数据文件的存储器、和处理器，所述处理器执行用于同步包含该移动设备的多个移动设备并且用于将音频数据文件的至少一部分输出至该扬声器用以由多个移动设备同步播放音频数据文件的的指令。

在另一个方面，一种用于播放音频文件的方法，包括将音频文件的至少一部分分配给多个移动设备中的每一个，同步移动设备，以及在已同步的移动设备上同时播放该音频文件所分配的部分，使得在听多个移动设备的听众听到该音频文件。

在该方法中，该同步可以包括发脉冲把同步脉冲从第一移动设备输送到第二移动设备。

该同步可以进一步包括为了播放所分配的部分在第二移动设备与第一移动设备之间传送扬声器延迟。

所分配的部分的播放可以包括规定第一移动设备播放音频文件的第一声道，而第二移动设备播放音频文件的第二声道。

所述声道可以是立体声声道。

所分配的部分的播放可以包括规定第一移动设备来播放音频文件的第一频带，而第二移动设备来播放音频文件的第二频带。

该方法可以进一步包括把音频文件的至少一部分从第一移动设备

LINKPLAY EXHIBIT 1002
Page 247 of 1292

传送到第二移动设备。

该传送可以包括短距离无线通信。

一种计算机程序产品可以存储用于执行该方法的指令。

附图说明

图 1 是无线网络的示意图，在该无线网络中，多个移动设备被编程为共同动作用以重现音频文件；

图 2 是图 1 的系统中示例性移动设备的透视图；和

图 3 是图 2 的移动设备的功能性框图；

图 4 是示出了一种用多个移动设备播放音频文件的示例性方法的流程图。

具体实施方式

示例性实施例的各方面涉及一种音频系统，并涉及一种用多个移动设备输出音频数据的方法。

参考图 1，示出了一种用于数字音频数据的声音再现的示例性音频再现系统。系统 10 包括一组移动设备 12，14，16，18，20，均具有无线数据发射和接收能力以及音频输出能力。这些移动设备被共同使用来再现音频文件。移动设备 12，14，16，18，20 的每一个可以被分配有该文件的音频声道，由此实现多声道的声音重现。无线移动设备 12，14，16，18，20 可以是具有语音通信能力的移动电话，或者是目的主要是用于播放音频数据文件且也可以具有无线通信能力的设备。当该系统正播放音频文件（诸如音乐文件或视频文件的音频分量）时，两个或多个移动设备的输出被同步，从而使得它们组合的输出重现了该音频文件。这些移动设备的每一个都具有要被播放的音频文件或播放列表（音频文件的选集）或一个或多个文件的选定声道的副本（copy）。这可以通过交换存储器存储卡或通过例如电缆或无线的通信链路传送这些文件来实现。无线转送可以通过诸如蓝牙的直接无线链路，或者经由诸如无线电话网络的通信网络而实现。音频数据的转送/下载可以在开始联合重放之前完成，或者可以在重播期间持续（例如在无线电广播传输的情形下就是如此）。在一个实施例中，每个移动设备都具有要被播放的一个或多个音频文件的副本，所述音频文件可能已事先从服务器或从计算机或从其他用于数字音频文件的存储装置中下载了。

示例性音频系统 10 包括五个无线移动通信设备 12，14，16，18，

LINKPLAY EXHIBIT 1002
Page 248 of 1292

20，此处图示为移动电话。其他移动设备也考虑到了，诸如 MP3 播放器，照相机，个人数字助理（PDA）和类似的具有播放数字音频文件和设备间通信能力的设备。移动设备 12，14，16，18，20 通常是容易携带的袖珍式设备，并能够在没有外部电源可用的场所而使用。因此，音频系统 10 能够通过在相同的场所把两个或多个移动设备放置一起而建立，诸如在相同房间中或者彼此之间大约 5 米建立，而无需额外的扬声器或接线。尽管图示了五个移动设备，但是也考虑到：移动设备可以多于或者少于 5 个。例如两个、四个、六个或更多这样的设备可以共同使用来作为音频系统 10。该移动设备可以被类似地配置并且参考示例性移动设备 12 而描述。

在多路设备模式（诸如多声道模式）下播放音乐文件的过程中，一个移动设备（在此示例性实施例中是设备 12）充当主设备，而其他参与的设备（14，16，18，20）是从设备。通常，主设备 12 用来选择音频文件，与被选作参与者的其他移动设备通信，可选地，在该主设备与一个或多个其他参与设备之间转送音频文件或其选定声道的副本，并且提示其他移动设备开始播放，由此实现由选定的参与者设备对该文件或该音频文件各声道的同步播放。然而，也考虑到：这些移动设备可以分担对这些操作的执行，例如一个设备可以转送文件，而另一个则提示其他的设备开始播放。也考虑到：该主设备可以只是充当其他移动设备的控制器，并且可以不播放音频文件（例如在多个移动设备可用的情况下就是如此）。通常，所有的设备 12，14，16，18，20 都包括软件指令，用于提示其他设备来播放相同的音频文件并且在被另一个移动设备提示来这样做时播放音频文件。因此，这些设备的任一设备都可以充当主设备，这取决于用户的偏好。

移动设备 12 包括天线 22，用于发射和接收音频信号。这些信号通常在无线电频率范围（从大约 30Hz 至大约 300GHz）内发射。移动设备 12 可以经由无线网络 24 与诸如设备 14、16、18、20 的其他语音通信设备无线地通信，所述无线网络 24 包括一个或多个通信站 26。移动设备 12 可以经由网络 24(例如经由互联网 30)与服务器 28 通信。该服务器又经由该网络向移动设备 12 提供音频数据（诸如音乐文件），音频/视频文件，和/或流送的无线电/电视传输。

如图 2 所示，移动设备 12 还包括显示器 32，诸如液晶显示器（LCD）

LINKPLAY EXHIBIT 1002
Page 249 of 1292

屏幕，显示器 32 充当用于从列表中选择音频数据文件和选择音频系统中的其他移动设备参与者的图形用户界面。移动设备 12 还包括常规的耳机 34，扬声器 36，麦克风 38，小键盘形式的用户接口 40 和可充电电池 42。用户接口 40 可以包括其他用户输入设备，诸如键盘、鼠标，滚轮，拨动开关，游戏板（gamepad），操纵杆设备，触摸屏输入设备，以及它们的组合。移动设备 12 包括合适的组件，用于将数字音频信号转换为声音，并将由扬声器 36 输出的声音放大。典型地，输出的声音可以在离移动设备有一定距离的地方（诸如至少大约 3 米或者 5 米远）听到，从而使得人们在无需将移动设备 12 放置在离耳朵过近的情况下就能听到该声音。移动设备 12 可以包括未图示的其他常规组件。

移动设备 12 典型地包括外壳或基座 44（图 2）。移动设备的所有上述组件 22，32，34，36，38，40，42 都可以与基座相关联，即安置在基座 44 内或其上。该基座可以是单基座或者是蛤壳（clamshell）式构造的，在蛤壳式构造中两个基座部分在枢轴点处连结。

图 3 是示出移动设备功能性组件的框图。该移动设备包括中央处理单元（CPU）或主处理器 50 和易失性和非易失性存储器，此处图示为包括随机读取存储器（RAM）和/或 ROM 存储器 52、且包括高速缓存器区域，用于临时存储数据（数据诸如是参与者 54 的列表和将在屏幕 32 上显示的播放列表）、以及闪存 56，该闪存的至少一部分可以采用一个或多个可插拔存储卡的形式，例如通用集成电路卡，像用户身份模块（SIM）卡。各组件经由适合的数据/控制总线通信。存储器 52 存储用于处理器 50 的指令，包括用于执行在下面所概述的且在图 4 中示出的示例性方法的指令。存储器 56 可以存储列出了电话号码的地址本 58 以及下载的数据文件 60，诸如音频数据文件。这些数字音频文件可以是采用任何合适的格式，诸如 MP3，WAV，AAC，AAC+，或窄带或宽带 AMR。应该理解的是，这些音频文件可以存储在任何合适的存储器中，但是不限于上述所提及的那些存储器。存储器 56 能够包括标识符，诸如国际移动装备标识（IMEI）码，能够向通信站 26 以及彼此之间唯一地标识移动设备。

CPU 50 可以运行存储在存储器 52 中的操作系统，诸如 Symbian™，或微软 Smartphone（在蜂窝电话的情形下是该操作系统）或 PalmOS（在 PDA 的情形下是该操作系统），所述操作系统允许例如经由互联网从

LINKPLAY EXHIBIT 1002
Page 250 of 1292

PC 或从服务器下载软件。因此，包括用于执行示例性方法的指令的软件可以在购买时驻留在移动设备 12 上，或者以后整个或部分地下载到兼容的移动设备上。适合的软件格式包括 JavaScript(也作为 ECMAScript 而所知），Java 2Micro Edition（J2ME），Personal Java Application Environment（PAE），C++，Visual Basic（VB）或类似的。

移动设备 12 包括与天线 22 相关联的收发信机 64，它充当用于短距离和长距离无线通信的接口，且与 CPU 50 通信。此处的短距离无线通信指在短距离上的无线通信，例如大约在 100 米，或者小于 100 米，典型地在大约 10 米（即对于到达通信站 26 过短，但是对于到达其他参与的移动设备则足够长）。示例性的短距离无线系统包括蓝牙，IrDa 和 Wifi。在蓝牙接口协议中，最大通信速度是每秒 1 兆比特，并使用 2.4GHz 的频率，该频率与在 IEEE 802.11b 系统的无线 LAN 中所使用的相等。其他短距离无线通信协议，诸如 UWB 规范，红外射线通信规范，或者无线 LAN（IEEE 802.11）规范，或类似的都可以作为替换或者作为补充而被提供来作为在参与的设备之间的直接通信。此处的长距离无线通信是指在较长的距离上的无线通信，例如大约 1 公里或更长，典型地大约在 5-10 公里，通过该长距离无线通信，移动设备 12 可以与基站 26 无线地通信。通常，发射这样的信号所采用的频率要低于短距离传输。应该理解的是：可以分别为短距离和较长距离传输提供相互独立的收发信机和/或天线。

指令可以被自动地从主设备 12 发送至从设备 14，16，18，20。例如，可以利用短消息业务（SMS），所述短消息业务为移动设备提供能够从一个移动设备向一个或多个其它移动设备发送文本消息的能力。可以利用的另一个业务是 MMS（多媒体消息业务），它使得带有声音、文本和图片的组合的消息能够在兼容 MMS 的移动设备之间发送。

如图 1 所示，移动设备的天线 22 传播并接收通信信号，例如无线电频率通信信号。无线收发信机 64 处理信号并将其中的信息提供给 CPU 50。该 CPU 总体上控制该设备各方面的操作，通常使用存储在存储器中的指令来控制。在该 CPU 的通用命令下，基于存储在存储器 56、52 中的音频文件的音频输出通过扬声器 36 被提供，并且可选地，基于音频/视频文件的视频输出通过显示器 32 被提供。

移动设备 12 还包括多路设备的处理组件（MDPC）70，用于在多路

LINKPLAY EXHIBIT 1002
Page 251 of 1292

设备(例如多声道模式)中启动和播放音频文件。如所示出的,MDPC 70可以是CPU的一部分或者是与之通信的附加组件。MDPC 70被配置用于执行存储在存储器52中的指令,用于选择多声道音频文件,选择参与的移动设备,将选定文件的声道分配给参与的移动设备(此时选择多声道方式播放),与其他参与的移动设备通信,并提示它们以同步的方式播放音频文件。

应该理解的是:处理器50,70和存储器52,56可以采用不同于那些特别图示的形式之外的形式。例如,一个或多个处理器的全部或部分可以与该存储器的部分或全部一起组合到单个芯片中。或者,该设备可以包括或多或少的处理组件和/或存储器。处理指令,音频数据文件等等可以存储在相互独立的存储器中,也可以存储在相同的存储器中。

小键盘40包括多个操作开关。这些开关包括:菜单按钮72,用于在设置多个操作定值和在音频文件再现中选择音频文件和参与者时调用菜单屏幕。

该移动设备的上述提及的组件50,52,56,64,70全部都可以与基座44相关联,即被安置在该基座内或安置在该基座上。

现在参考图4,图示了一种使用系统10播放音频文件的示例性方法。应该理解的是:该方法可以包括更多、更少或者不同的步骤,并且这些步骤无需按照所示出的次序执行。该方法开始于步骤S100。

在步骤S102,用户选择要播放的多声道的音频文件。例如使用菜单按钮,用户滚动诸如音乐文件的音频文件的列表,并且例如通过点击一个或多个文件来选择要播放的文件。当所选择的文件尚没有驻留在用户设备12的存储器中,该移动电话可以与服务器28无线地通信,所述服务器将文件转送至主设备的存储器56(步骤S104)。如果该文件已经驻留在设备12上,则该步骤可以被省略。

在步骤S106,用户可以挑选在多路设备(例如多声道)模式下播放文件。如果用户选择了多路设备模式,那么MDPC 70可以自动地使显示器32显示菜单用以选择参与的移动电话。用户可以从他的地址本或者通过输入电话号码或者所选择的从设备的唯一ID选择参与者,或者从由MDPC所检测的位于通信范围内的移动电话的列表中选择参与者(步骤S108)。一旦用户已经选择了一个或多个音频文件和参与者以及请求了播放(例如,通过在用户界面上按下按钮),剩下的步骤可以在

LINKPLAY EXHIBIT 1002
Page 252 of 1292

CPU/MDPC 的控制下自动地进行，除非特别注明。

在步骤 S110，通信链路被建立，由此 MDPC 70 例如使用蓝牙接口与所选择的移动设备通信。可选择地，MDPC 可以经由基站 26 无线地通信或者通过主移动设备与从移动设备之间的电缆链路通信。

在步骤 S112，主设备 12 确认每个所选择的从设备都具有要在多路设备模式下播放的文件或者列表的副本。如果这些设备的任一何设备不具有该文件，那么 MDPC 70 可以根据预定义的过程启动文件的自动转送/下载。或者，用户可以被提示来选择方法用于在从设备上建立音频文件（或者其声道），诸如通过有线或无线转送文件，从服务器 28 直接将文件下载到从设备或者间接地经由 PC 等将文件下载到从设备。通常，希望移动设备从文件的相同版本播放文件，即一个来自相同原始源的文件，所述源以相同的速率（Kb/秒）下载，从而使得它具有相同的质量。在一个实施例中，用户可以将在其上存储有音频文件的存储卡依次放在每个所选择的移动设备中，并将所选择的音频文件存储在从设备的存储器 52，56 中。在对文件转送的权限限制限制了对文件的转送的情况下，所转送的音频文件可以在播放之后或者在某个时间延迟之后被自动地删除。例如，该音频文件可以临时地存储在易失性存储器上，该存储器的权限是使用具有播放该音频文件权限的设备共同地单次使用播放。或者，在音频文件的一部分被传送并存储在缓冲器中且在该文件的后续部分（在时间上稍候要播放）被传送之时被从缓冲器中删除的情况下，也可以建立部分的转送。在一个实施例中，该音频文件与诸如字母数字代码的唯一标识符相关联。该标识符由例如主设备传送到服务器，该服务器然后向从设备提供该文件的相同副本以及用于以规定的速率编码的指令，从而使该主设备和一个或多个从设备上的文件的版本实质上相同。

在步骤 S114，主设备 12 可以询问其他选择的参与者设备 14，16，18，20，用以确定各设备的扬声器的频率响应范围。在参与的移动设备具有不同的频率响应的情况下，该主设备可以基于它们的频率响应将声道分配给参与的设备（例如将具有较低频率的声道分配给在低频范围内响应优良的设备，等等）。

在步骤 S116，参与的设备均可以被分配有多声道文件的声道（和/或频率范围）用于多声道播放。在设备数目多于文件中声道数量的情况

LINKPLAY EXHIBIT 1002
Page 253 of 1292

下，两个或多个设备都可以被分配相同的声道。在设备数目少于声道数目的情况下，一个移动设备可以被分配有两个或多个声道。在一个实施例中，MDPC 通过向每个移动设备通知它将播放哪个声道来分配声道。在另一个实施例中，用户被询问关于哪个设备要被分配特定的声道以便于提供环绕声，这可能取决于参与的设备在房间中的位置。例如，用户可以将音频声道分配给相对于用户的左前和右前方位置的移动电话以充当前方扬声器，并将该音频文件的相应后扬声器音频声道分配给位于相对于用户左后方和右后方的位置的移动电话，以及让第五个移动电话充当中央声道，以类似环绕声音扬声器。对于立体声，可以使用两个声道代表左和右扬声器。可选择地，所分配的声道可以采用频带的形式，每个频带仅代表移动设备能够重现的带宽的一部分，参与的设备被分配不同的频带。因而，例如，一个参与的设备可以被分配高频带（诸如1000-20，000Hz），第二个移动设备可以被分配中频带（诸如 150-999Hz），第三个移动设备可以被分配低频带（诸如 20-149Hz）等等。在另一个实施例中，所有的参与者设备都被分配来播放整个文件，例如在该音频文件是单一声道（单声道）音频文件的情况下就是如此。

在步骤 S118，参与的设备 12，14，16，18，20 被同步用于播放它们各自的声道。同步保证了这些移动设备都同时（至少对于用户的耳朵是同时）地播放音频文件。同步可以考虑每个设备的扬声器系统的标准延迟和/或任何其他发生在设备接收播放命令与实际开始播放之间的延迟。在一个同步方法中，每个参与的从设备将其标准延迟发射给主设备。该主设备然后计算给每个从设备提供诸如脉冲的信号以启动播放的合适时间，这样就把延迟考虑进来了。因此，这些脉冲时间可以能是交错的，这取决于各设备的延迟，从而使得这些设备全部都同时开始播放（或者至少降低了各延迟对开始时间的影响）。例如（在步骤 S 122），该主设备发送第一个脉冲（由第一个设备所识别），用以启动第一个设备的播放，稍后发送第二个脉冲给第二个设备（具有稍短的延迟），用以启动第二个设备的播放，依此类推。

在另一个实施例中，该主设备可以计算从响应时间至测试信号播放启动脉冲应当被发送出去的时间。在这个实施例中，该主设备发送诸如脉冲的测试信号至每个设备。在发送测试脉冲之前，这些从设备被指示去在它们接收到测试脉冲时启动测试声音的播放。该主设备然后记录下

LINKPLAY EXHIBIT 1002
Page 254 of 1292

在该测试信号已经被发送后由该主设备收到测试声音的时间，并计算延迟。该方法不仅考虑了设备的内部延迟，还考虑了由于测试脉冲到达设备所花的时间和测试声音穿过空气到达主设备所花的时间所引起的外部延迟。假设听众距离主设备要比距离从设备更近，这可以提供声音更为准确的同步。同步的准确性将在某种程度上取决于主设备的处理能力和能够发送定时脉冲的的准确性。

在另一个实施例中，这些从设备均被指示去计算它们自己的开始时间，从而使得这些扬声器全部都在它们接收到播放起始脉冲之后（诸如一秒的延迟或五秒的延迟）的一个特定的时间开始播放。关于在播放启动脉冲之后何时开始播放的指令可以是软件的一部分，因而可以驻留在从设备上。每个设备都通过从特定时间减去其标准延迟而计算其自己的实际开始时间，所述标准延迟大约为 50 或 100 毫秒。单个同步脉冲随后由主设备发送到这些设备全部用以启动播放（参见步骤 S122）。对于已知延迟为 100 毫秒的设备，该设备可以在接收到该脉冲之后 900 毫秒时开始，从而使得其扬声器连同其他设备一起在脉冲之后一秒开始播放。

在再又一个实施例中，所有的这些设备只是被指示去在它们一接收到同步脉冲（或者在其后的预先选择的时间）就开始播放。该实施例忽略了各移动电话的延迟以及声音传播的时间差，但是尽管如此当标准延迟时间相对类似且这些设备的间距相当靠近（诸如在主设备的大约 5 米内）时，也还是可以提供令人满意的同步。

在步骤 S120，参与的移动设备可以从音频文件中提取所分配的声道。例如，每个参与的设备的 MDPC 使用可用的嵌入式音频信号处理（例如，RF 带宽限制滤波器）来滤出音频文件的正确部分以供重放。正如将要理解的，对所分配的声道的提取可以在该声道一被分配时就开始。

在步骤 S122，该主设备启动对音频文件或者选定的播放列表的重播。例如，该主设备可以向从移动设备发送诸如同步脉冲的信号用以开始联合重放。该信号可以作为可听的信号经由空气发送，该信号要大到足以被这些移动设备的麦克风所拾取，或者该信号可以作为数字信号经由有线或无线通信链路发送。进一步的同步脉冲可以随后发送，例如在每个音轨开始时发送。

在步骤 S124，该移动设备在同步脉冲之后不久开始联合重放。典型

LINKPLAY EXHIBIT 1002
Page 255 of 1292

地，该重放包括用合适的数字到模拟转换器将音频数据转换为声波，可选地，通过诸如 RF 接收增益可变放大器的放大器来放大（或衰减）声音，并经由扬声器输出放大的声音。应该理解是：如果该音频文件是视听文件，那么该文件的视频部分可以在一个或多个参与的移动设备的屏幕 32 上随音频部分同时地显示。该方法在步骤 S126 结束。当然，如果用户在步骤 S106 选择不在多路设备模式下播放该音频文件，则该方法可以前进到步骤 S128，在此该音频文件仅在用户的设备上播放。

执行图 4 方法的指令可以以计算机程序产品实现，所述计算机程序产品可以由多路设备处理组件 70 来执行。该计算机程序产品可以是控制程序在其上记录的切实的计算机可读记录介质，或者可以是可发射的载波，在该载波中，该控制程序体现为为数据信号。

示例性的系统和方法使得一些人们可以使用他们的移动设备来听音频文件，而无需分离的扬声器系统。当一组人聚集在一起但还没有接入到常规的音频系统时，该系统就有了特定的用途。让多个移动设备播放相同的音频文件还有输出更大的优点。此外，通过仅将音频文件的一部分分配给每个设备能够改善保真度。最终，音频文件可以以立体音响，四声道或其它多声道模式来播放。

应该理解的是，上述各所公开的以及其它特征和功能，或者其替换可以期望组合到许多其它不同的系统或应用中。同样，此处多种现在无法预料或不可预期的选择，修改，变化或改进随后可以由本领域技术人员做出，并且也意图由下述权利要求所包括。

LINKPLAY EXHIBIT 1002
Page 256 of 1292

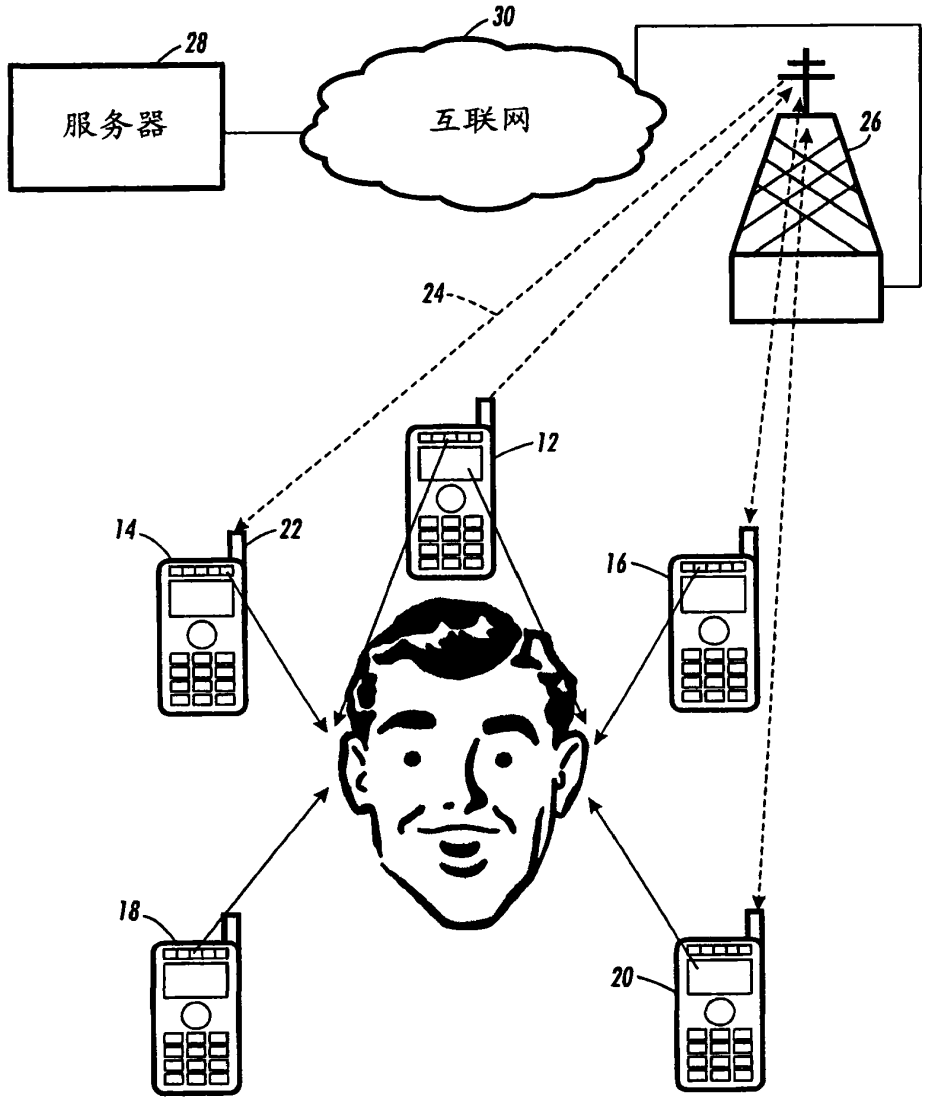


图 1

LINKPLAY EXHIBIT 1002
Page 257 of 1292

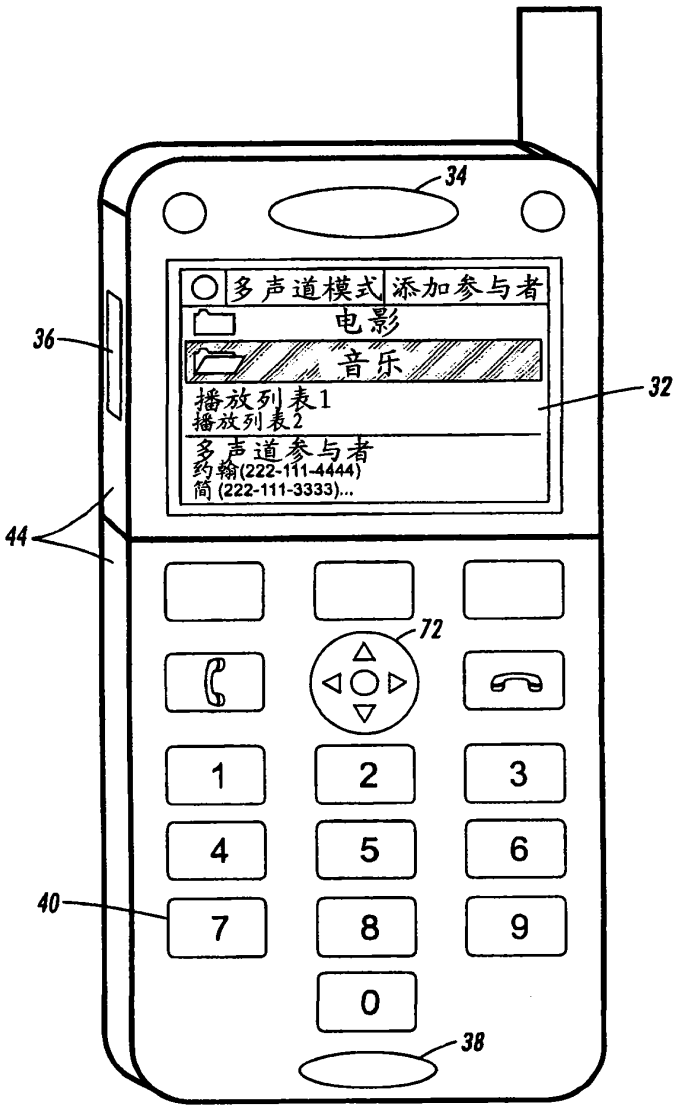


图 2

LINKPLAY EXHIBIT 1002
Page 258 of 1292

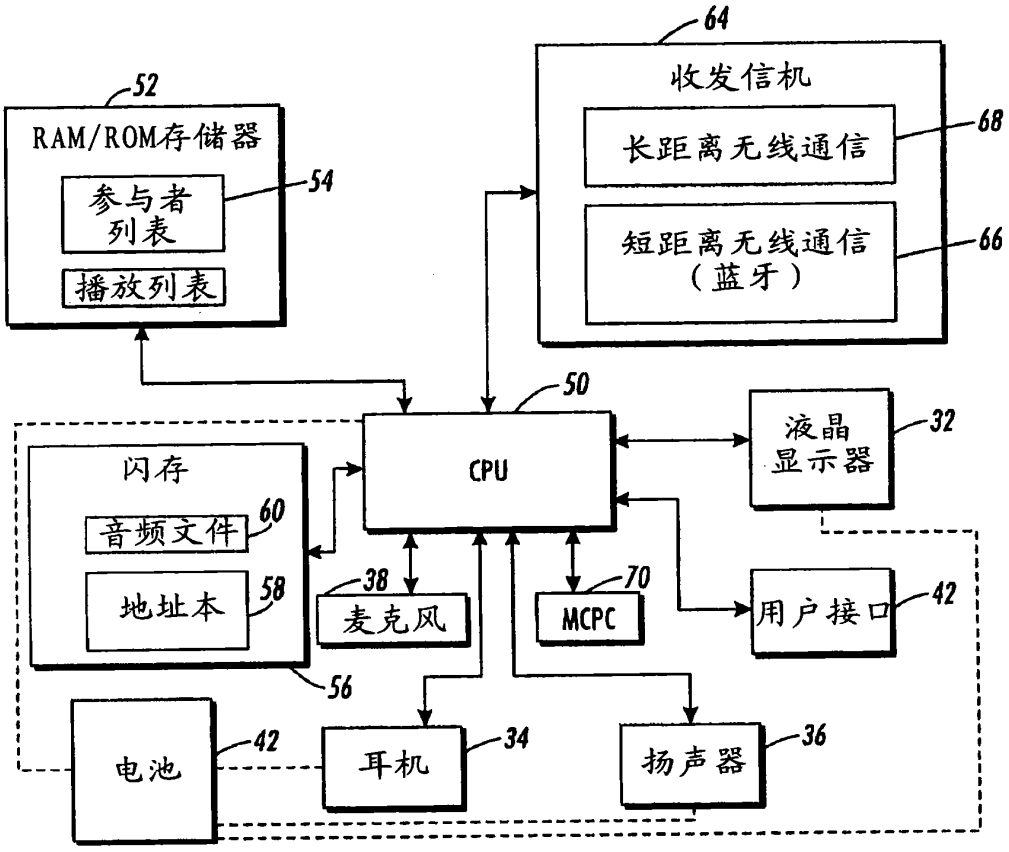


图 3

LINKPLAY EXHIBIT 1002
Page 259 of 1292

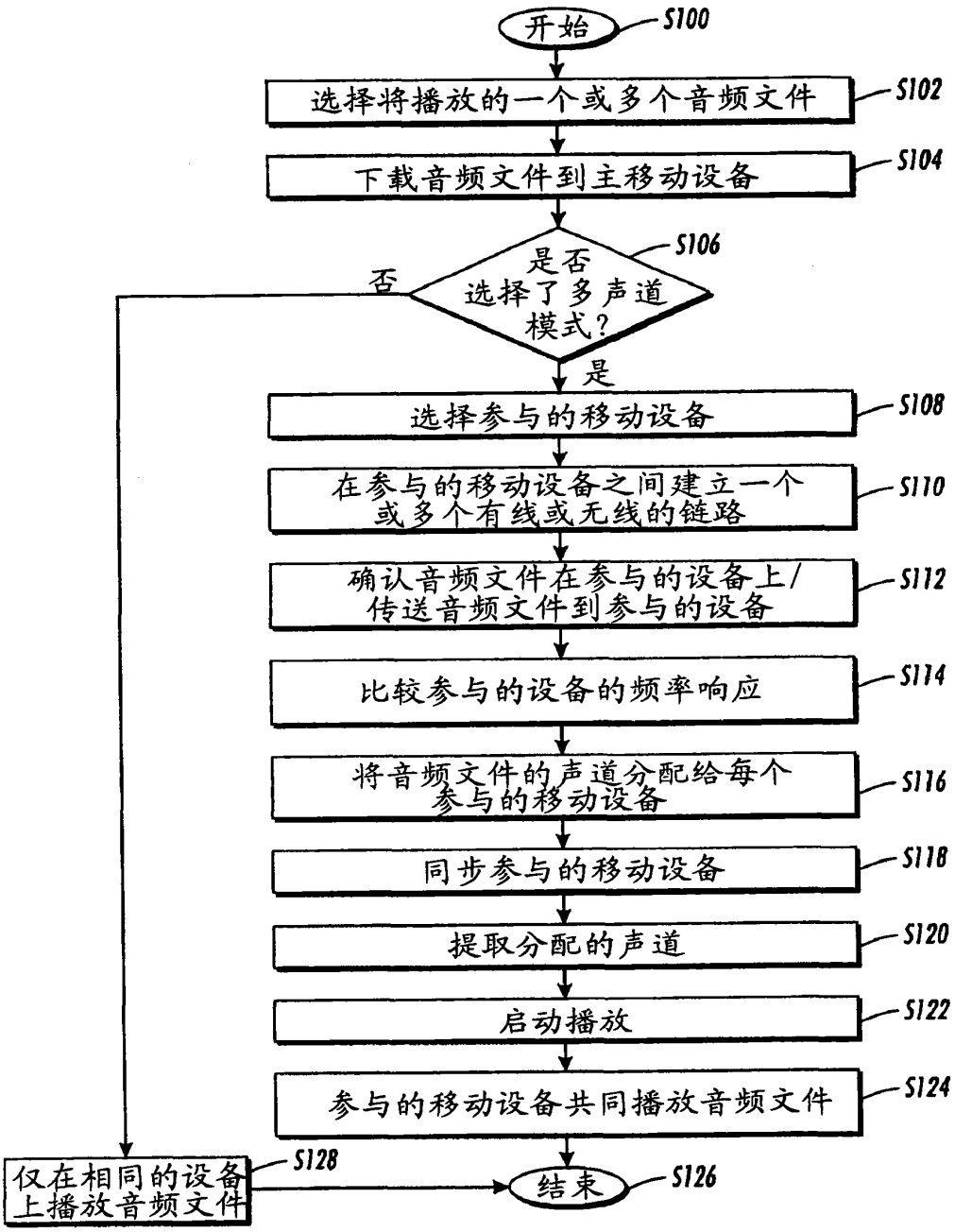


图 4

LINKPLAY EXHIBIT 1002
Page 260 of 1292

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : **H01S**	**A2**	**(11) International Publication Number:** **WO 97/09756** **(43) International Publication Date:** 13 March 1997 (13.03.97)

(21) International Application Number: PCT/US96/13713

(22) International Filing Date: 26 August 1996 (26.08.96)

(30) Priority Data:
521,681 31 August 1995 (31.08.95) US

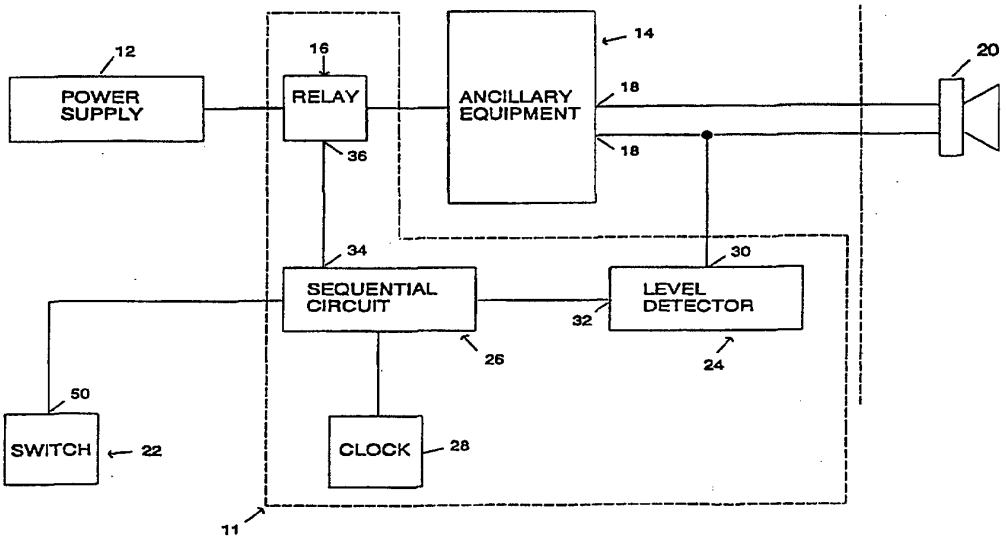
(71)(72) Applicants and Inventors: BUCALO, Brian, D. [US/US]; Apartment LPH 9, 1010 South Ocean Boulevard, Pompano Beach, FL 33062 (US). BUCALO, Louis, R. [US/US]; 3418 Dividadero Street, San Francisco, CA 94123 (US).

(74) Agents: POISSANT, Brian, M. et al.; Pennie & Edmonds, 1155 Avenue of the Americas, New York, NY 10036 (US).

(81) Designated States: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CU, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
Without international search report and to be republished upon receipt of that report.

(54) Title: METHOD AND APPARATUS FOR AUTOMATIC SHUT OFF OF ELECTRONIC EQUIPMENT



(57) Abstract

An audio output signal generated by audio, audio/visual, or electronic musical instrument equipment is monitored. If the level of the output signal falls below a predetermined threshold for a predetermined period of time, then power to the equipment is automatically shut off, resulting in a state that is the same as or similar to that which occurs when the normal user power switch is turned off. The equipment may also be turned on and turned off with the normal user power switch.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AM	Armenia	**GB**	United Kingdom	**MW**	Malawi
AT	Austria	**GE**	Georgia	**MX**	Mexico
AU	Australia	**GN**	Guinea	**NE**	Niger
BB	Barbados	**GR**	Greece	**NL**	Netherlands
BE	Belgium	**HU**	Hungary	**NO**	Norway
BF	Burkina Faso	**IE**	Ireland	**NZ**	New Zealand
BG	Bulgaria	**IT**	Italy	**PL**	Poland
BJ	Benin	**JP**	Japan	**PT**	Portugal
BR	Brazil	**KE**	Kenya	**RO**	Romania
BY	Belarus	**KG**	Kyrgystan	**RU**	Russian Federation
CA	Canada	**KP**	Democratic People's Republic of Korea	**SD**	Sudan
CF	Central African Republic			**SE**	Sweden
CG	Congo	**KR**	Republic of Korea	**SG**	Singapore
CH	Switzerland	**KZ**	Kazakhstan	**SI**	Slovenia
CI	Côte d'Ivoire	**LI**	Liechtenstein	**SK**	Slovakia
CM	Cameroon	**LK**	Sri Lanka	**SN**	Senegal
CN	China	**LR**	Liberia	**SZ**	Swaziland
CS	Czechoslovakia	**LT**	Lithuania	**TD**	Chad
CZ	Czech Republic	**LU**	Luxembourg	**TG**	Togo
DE	Germany	**LV**	Latvia	**TJ**	Tajikistan
DK	Denmark	**MC**	Monaco	**TT**	Trinidad and Tobago
EE	Estonia	**MD**	Republic of Moldova	**UA**	Ukraine
ES	Spain	**MG**	Madagascar	**UG**	Uganda
FI	Finland	**ML**	Mali	**US**	United States of America
FR	France	**MN**	Mongolia	**UZ**	Uzbekistan
GA	Gabon	**MR**	Mauritania	**VN**	Viet Nam

Method and Apparatus for Automatic Shut Off of Electronic Equipment

FIELD OF THE INVENTION

The present invention relates generally to automatic shut off devices, and more particularly to methods and apparatus for automatically shutting off electronic devices having an audio signal output.

BACKGROUND

Many electronic devices having an audio signal output (such as audio tape decks, CD players, electronic keyboards, amplifiers, pre-amplifiers, video tape players, video disk players, etc.) will remain in a powered on state indefinitely, even if no audio signal output is being generated. Thus, users of such audio, audio/visual, or electronic musical instrument devices may not be aware that the device is or remains powered on after they have finished using it. For example, the user of a CD player may listen to one or more CDs, and then forget to turn off the CD player after a CD has stopped playing. Since no sound is generated after a CD has stopped playing, the user may leave the CD player and its associated amplifier powered on for hours, days, or even weeks, wasting energy, causing excessive equipment wear, and posing a potential fire hazard.

Similar drawbacks and hazards are presented to users of amplified musical instruments, such as electronic keyboards. Again, these instruments and devices cease to provide an audible sound output after the user stops playing or otherwise interacting with the instrument. Therefore, the user may forget to turn off the instrument or amplifier after she has finished playing, and the device will stay powered on indefinitely. Clearly, any device which can remain powered on indefinitely, but which generates no audio output signal when not in use, presents similar problems.

Prior art devices have been described which turn off electronic equipment after sensing the presence of a

LINKPLAY EXHIBIT 1002
Page 263 of 1292

specific signal. For example, U.S. Patent 5,170,159 to Kawabata et al., discloses an apparatus which has an auto-sleep mode. In this mode, a C.P.U. monitors for the presence of specific electronic signals which indicate that the end of the source audio material (such as a cassette tape or CD) has been reached. When such a signal is detected, the equipment is turned off. As noted in the Kawabata patent, these signals may be in the form of the output of a photo interrupter (which generates an output when the playback of a cassette tape is complete), or an end code, such as is detected by a CD player when a CD has finished playing.

During normal daytime use of audio or audio/visual equipment (such as stereo equipment) the user might wish to play many successive tapes or CDs. In this situation, the user may not want the equipment to shut off at the end of each tape or CD. Therefore, devices such as those disclosed in the Kawabata patent are primarily useful for bedtime application, or when the user wants the unit to specifically shut off once the audio material (e.g., tape or CD) has been played. Such prior art devices also cannot be modified for use in devices such as electronic keyboards or musical instrument amplifiers.

Other prior art techniques for shutting off electronic equipment incorporate sleep timers which shut off the equipment after a pre-selected period of time. Such sleep timers, which are commonly used in television sets, require human intervention for their operation. For example, the Kawabata patent discloses a device in which a sleep key must be depressed for the auto-sleep mode to be entered. That is, a conscious decision and intervention by the user of the electronic equipment must be made to insure that the equipment will shut itself off automatically at a later time. If this human intervention does not take place, the device may remain powered on indefinitely.

In addition, and perhaps most importantly, prior art sleep timer devices cannot practically be used to prevent the user from inadvertently leaving equipment on after normal

LINKPLAY EXHIBIT 1002
Page 264 of 1292

daily use. During such normal daily use, the user would not want the device to automatically shut off after a predetermined period of time, since it is not always clear how long the equipment will be in use.

Accordingly, there remains a need in the art for a device which can automatically, and without human intervention, shut off audio, audio/visual, or electronic musical instrument equipment generating an audio output signal, after the equipment has ceased to generate an audio output signal for a period of time, indicating that a user is no longer using the equipment.

SUMMARY

The present invention meets these needs by providing a device which automatically shuts off audio, audio/visual, or electronic musical instrument equipment generating an audio signal output after a period of non-use, without prior intervention on the part of the operator of the equipment.

In such a device, the audio output level is preferably continuously monitored. If the audio output level falls below a predetermined threshold for some predetermined (and possibly user programmable) length of time, power to at least a portion of the electronic equipment is cut off. Power to the equipment may in this way be turned off, resulting in a state identical or similar to that which occurs when the normal user controlled power switch is turned off. The user can restore power by pressing a single power switch, most ideally the normal user controlled power switch.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a schematic showing audio, audio/visual, or electronic musical instrument equipment including a preferred digital embodiment of an automatic shut off device.

Figure 2 is a schematic showing audio, audio/visual, or electronic musical instrument equipment

LINKPLAY EXHIBIT 1002
Page 265 of 1292

including a preferred alternative digital embodiment of an automatic shut off device.

Figure 3 is a schematic showing audio, audio/visual, or electronic musical instrument equipment including a preferred analog embodiment of an automatic shut off device.

DETAILED DESCRIPTION

The structure and function of the preferred embodiments can best be understood by reference to the drawings. The reader will note that the same reference numerals appear in multiple figures. Where this is the case, the numerals refer to the same or corresponding structure in those figures.

Referring now to **Figure 1**, a schematic of audio, audio/visual, or electronic musical instrument equipment **10** including automatic shut off device **11** is shown. As will be made clear by the discussion below, equipment **10** is preferably not electronic equipment that receives a continuously broadcast signal, such as a television or radio receiver. Automatic shut off device **11** preferably works with audio, audio/visual, or electronic musical instrument equipment in which an audio output signal ceases when either a) a prerecorded program (such as on a tape or CD) finishes; or b) the user ceases interaction with the equipment.

Equipment **10** includes a conventional power supply **12**, and ancillary equipment **14**. Ancillary equipment **14** includes the electronics and mechanisms (such as amplifiers, motors, optics, etc.) necessary to generate an analog or digital audio signal either from a prerecorded medium (such as a tape or CD), or from the input of a user (such as would occur with the use of a musical instrument). Ancillary equipment **14** may also include other power consuming devices (such as displays, lights, LEDs, etc.) that are normally in use when the power switch **22** of equipment **10** is turned on. Thus, the power status or state of ancillary equipment **14** (i.e., whether or not ancillary equipment **14** is on or off) is normally controlled by the user operated power switch **22**

LINKPLAY EXHIBIT 1002
Page 266 of 1292

associated with equipment **10**. Equipment **10** may also include power consuming devices (such as clocks, memories, etc.) that are always in use when equipment **10** is plugged in, regardless of whether or not the power switch is on.

Power supply **12** supplies electrical power to ancillary equipment **14** via power coupling device, or relay **16**. Relay **16** may be replaced with a semiconductor switch such as a transistor, or by any other switching device controllable by an input signal. Depending upon the desired configuration, a portion of power supply **12** may be included within ancillary equipment **14**.

Ancillary equipment **14** includes one or more outputs **18** upon which one or more audio output signals appear. Audio output **18** may be coupled directly to an external speaker **20**, or to some other piece of audio equipment such as an amplifier or mixer (not shown). The operation of relay **16** (and thus whether or not ancillary equipment **14** will receive power) is controlled by switch **22**, level detector **24**, sequential circuit **26**, and clock **28**. Power may be supplied to elements **22** through **28** in a conventional manner, such as directly from power supply **12**, or from some other source of electrical energy, such as a battery or capacitor (not shown).

Level detector **24** has an input **30** which is connected to one or more audio outputs **18** of ancillary equipment **14**. Level detector **24** preferably has two output states which are representative of the level of the audio signal detected at input **30**. For example, if the detected audio signal has a level above a predetermined threshold, a logic 1 may be generated at output **32**. If the detected audio signal has a level below a predetermined threshold, a logic 0 may be generated at output **32**. The chosen threshold level should be appropriate for the type of equipment that automatic shut off device **11** is to be used with. For example, with certain types of audio equipment, there may be a certain amount of noise which is generated at the outputs,

LINKPLAY EXHIBIT 1002
Page 267 of 1292

regardless of whether or not the audio equipment is "in use" in the conventional sense.

If ancillary equipment **14** can reproduce sound from a prerecorded program (such as from a tape or CD), ancillary equipment **14** may include certain components (such as motors, lasers, etc., not shown) that receive or draw power (or more power) when an audio signal is being generated at output **18**. Thus, such a component would generally be in a "powered on" state when an audio signal is generated at output **18**, and would generally be in a "powered off" state when no audio signal is generated at output **18**. For example, a CD player may include a motor which causes a CD to rotate when the player generates an audio signal output. CD players are typically configured such that this motor turns off after a CD has finished playing.

In equipment **10** including components which are generally powered on only when an audio signal output is being generated, level detector **24** could be coupled to a power or control input of such a component (instead of output **18**), and level detector **24** could be configured such that its two output states reflect whether or not the component it is coupled to is in a powered on or powered off state.

Sequential circuit **26** preferably receives as inputs electrical or other signals received from level detector **24**, clock **28**, and switch **22**. Clock **28** may also be incorporated in sequential circuit **26**. Depending upon the signals received from switch **22** and level detector **24**, sequential circuit **26** generates at its output **34** a voltage which is received by input **36** of relay **16**. If sequential circuit **26** is in a state which indicates that power should be supplied to ancillary equipment **14**, the signal generated at output **34** is of the type that would allow relay **16** to pass power from power supply **12** to ancillary equipment **14**. Otherwise, the voltage or signal generated at output **34** is of the type that would prevent relay **16** from passing power from power supply **12** to ancillary equipment **14**. Again, it should be understood that ancillary equipment **14** can include power consuming

LINKPLAY EXHIBIT 1002
Page 268 of 1292

devices that are normally turned on (including audio generating electronics and any associated displays, keyboards, etc.) when the power to equipment **10** is turned on.

The operational requirements of sequential circuit **26** are as follows: at any time, the user of equipment **10** should be able to either turn on or turn off equipment **10** by pressing switch **22**, which is preferably a momentary contact switch in this embodiment. If sequential circuit **26** receives an input from level detector **24** indicating that the audio signal output level of ancillary equipment **14** is below a predetermined threshold, then a timing operation is begun. This timing operation will continue until either: (a) an audio signal having a level above a predetermined threshold is detected; (b) an input is received from switch **22** indicating that power should be turned off immediately; or (c) a predetermined or programmable time-out period has elapsed. Under circumstances (b) and (c), sequential circuit **26** generates an output which will cause relay **16** to shut off power to ancillary equipment **14**.

As will be apparent to those skilled in the art, sequential circuit **26**, which may include both logical and memory elements, may be configured in any of a number of different ways to provide the proper output necessary to control relay **16**. Sequential circuit **26** may be implemented with a registered programmable array logic (PAL) device, or with any other elements which can be combined to form an appropriate sequential circuit. Again, clock **28** may be external to sequential circuit **26**, or may form a part of sequential circuit **26**.

Referring now to **Figure 2**, an alternative embodiment of automatic shut off device **11** is shown. In **Figure 2**, the functions of sequential circuit **26** and clock **28** are performed specifically by the combination of OR gate **40**, timer **42**, AND gate **44**, and memory element or flip flop **46**. Memory element **46** is preferably a positive- or negative- edge triggered DQ flip flop which can be reset or cleared if desired.

LINKPLAY EXHIBIT 1002
Page 269 of 1292

Timer **42** may be preprogrammed to measure a certain length of time. The length of time measured may also be programmable by the user of equipment **10**. When reset input **48** of timer **42** receives the appropriate signal (i.e., either a logic 0 or a logic 1 signal) timer **42** is reset to zero. In the embodiment shown in **Figure 2**, timer **42** is reset when reset input **48** receives a logic 1 signal. Reset input **48** receives the output of OR gate **40**. OR gate **40** receives as its inputs the output **32** of level detector **24**, and the output **50** of switch **22**. Switch **22** is preferably a momentary contact switch which generates at its output **50** a single positive going pulse when switch **22** is depressed or otherwise activated. Thus, timer **42** is reset either when switch **22** is depressed, or when level detector **24** generates a logic 1 at its output **32**, indicating that the audio signal present at output **18** is above a predetermined threshold.

In a preferred embodiment, timer **42** generates at its output **52** a logic 1 when timer **42** has not yet timed out; and timer **42** generates at its output **52** a logic 0 when it has timed out, i.e., when the predetermined time has elapsed. Output **52** of timer **42** is used as an input by AND gate **44**.

Memory element **46** is preferably configured as a divide-by-two counter with the inverted Q output ($\bar{Q}$) fed back into the D input. The Q output is used as an input by AND gate **44**. Upon initial power up of equipment **10** (i.e., when power supply **12** first plugged in), memory element **46** may be reset so that it generates a logic 0 at its Q output. Thus, on initial power up, AND gate **44** receives from the Q output of memory element **46** a logic 0. Regardless of what logic signal timer **42** generates at its output **52**, AND gate **44** generates at its output **34A** a logic 0 which is received by input **36** of relay **16**. Thus, as described above, relay **16** prevents power from flowing between power supply **12** and ancillary equipment **14**.

At this time, if the user of equipment **10** presses or otherwise activates switch **22**, the following events occur: timer **42** is reset, thus generating a logic 1 at its output

LINKPLAY EXHIBIT 1002
Page 270 of 1292

52; the Q output of memory element 46 toggles to a logic 1; AND gate 44 generates at its output 34A a logic 1, and relay 16 closes the circuit between power supply 12 and ancillary equipment 14.

If the user of equipment 10 desires to turn the equipment off, switch 22 is depressed or otherwise activated again. When this occurs, timer 42 is again reset, the Q output of memory element 46 toggles to a logic 0, and AND gate 44 generates at its output 34A a logic 0. Again, this causes relay 16 to open the circuit between power supply 12 and ancillary equipment 14, shutting off power to ancillary equipment 14. The user may turn the power on again by pressing switch 22.

If ancillary equipment 14 is in a powered on state but ceases to generate an audio signal at its output 18 (as may occur when a CD has stopped playing, or when the user stops playing a musical instrument) level detector 24 generates at its output 32 a logic 0. If switch 22 is not depressed or otherwise activated, reset input 48 of timer 42 receives a logic 0, and timer 42 begins the timing operation. If switch 22 is not depressed before the timing operation is complete, timer 42 will generate at its output 52 a logic 0 when timing is complete. Thus, AND gate 44 will generate at its output 34A a logic 0, causing relay 16 to shut off power to ancillary equipment 14, as described above. Memory element 46 may be configured such that it is cleared or reset (so that its Q output is at a logic 0) whenever timer 42 generates at its output 52 a logic 0. Again, if the user of equipment 10 wishes to restore power, all he or she needs to do is press or activate switch 22.

Referring now to **Figure 3**, a preferred analog embodiment of automatic shut off device 11 is shown.

Ancillary equipment 14 receives power from power supply 12 via relay 16, in the manner discussed above with respect to **Figures 1** and 2.

Again, the audio outputs 18 of ancillary equipment 14 may be directly coupled to an external speaker 20, or may

LINKPLAY EXHIBIT 1002
Page 271 of 1292

be coupled to another piece of audio equipment such as an amplifier, mixer, recorder, etc.

Output **18** is coupled to an input of amplifier **62**. An output of amplifier **62** is coupled to rectifier **66**, which is in turn coupled to an input of OR gate **68**.

Switch **22** is preferably a toggle switch in this embodiment. The 'ON' contact of switch **22** is connected to switch debouncer **70**, which is in turn coupled to differentiator circuit **72**. The output of differentiator circuit **72** is fed into an input of amplifier **74**. The output of amplifier **74** is coupled to an input of monostable multivibrator (or one-shot) **76** via diode or rectifier **78**. The output of monostable multivibrator **76** is coupled to a second input of OR gate **68**.

The OFF contact of switch **22** is coupled to an input of switch debouncer **80**. The output of switch debouncer **80** is coupled to an input of differentiator **82**. Differentiator **82** generates an output signal which is used as an input by amplifier **84**. The output of amplifier **84** is coupled to an input of monostable multivibrator (or one-shot) **86**. The output of monostable multivibrator **86** controls a transistor switch **88**, which is operatively coupled to discharge the capacitor in parallel RC circuit **90**.

The output of OR gate **68** is coupled to transistor switch **92**. Transistor switch **92** is coupled to RC circuit **90**, and can rapidly charge the capacitor in RC circuit **90** to a predetermined voltage. The output voltage of RC circuit **90** is used as an input by high impedance comparator **94**. The output of comparator **94** controls transistor switch **96**. Transistor switch **96** has an output **34B** which is coupled to input **36** of relay **16**.

The operation of the circuit shown in **Figure 3** is as follows: when switch **22** in the OFF position, relay **16** is turned off and power supply **12** does not provide power to ancillary equipment **14**. When switch **22** is in the ON position, a predetermined voltage (labeled V+ here) appears at the input of switch debouncer **70** in a stepwise fashion.

LINKPLAY EXHIBIT 1002
Page 272 of 1292

Switch debouncer **70** removes any switch bounce transient signals. A clean step waveform is then fed from switch debouncer **70** into differentiator **72**. Differentiator **72** produces a single short pulse, which is received by amplifier **74**.

Amplifier **72** then amplifies the pulse to provide a suitable triggering pulse for monostable multivibrator **76**. Rectifier **78** assures that monostable multivibrator **76** only receives triggering pulses of one polarity. Should monostable multivibrator **76** require negative trigger pulses, then rectifier **78** could be oriented in the opposite way.

Monostable multivibrator **76** produces a wide output pulse which is coupled into an input of OR gate **68**. Subsequently, a pulse appears at the output of OR gate **68**. This output pulse is coupled into transistor switch **92**. During the time that transistor switch **92** is ON, the power supply voltage V+ appears at the input to parallel RC circuit **90**, charging the capacitor in the circuit **90**.

Comparator **94** senses the output voltage of RC in circuit **90**, and produces a step voltage at its output, if the output voltage of RC circuit **90** is above a predetermined threshold. This step voltage activates transistor switch **96**, which then turns on relay **16**. The contacts of relay **16** are then closed, thereby allowing power to flow from power supply **12** to ancillary equipment **14**.

When an audio signal above a predetermined level is present at output **18**, this signal is amplified by amplifier **62**, rectified by rectifier **66**, and then presented as an input to OR gate **68**. Depending upon the nature of the audio signal generated by ancillary equipment **14**, OR gate **68** may generate a series of logic 1 pulses, a constant logic 1 output, or a series of logic 1 pulses of varying length. Whenever a logic 1 is generated by OR gate **68**, transistor switch **92** is turned on, and the capacitor in RC circuit **90** is charged. RC circuit **90** is thereby maintained in a fully charged state, which keeps relay **16** in an ON state through the actions of comparator **94** and transistor switch **96**, discussed above.

LINKPLAY EXHIBIT 1002
Page 273 of 1292

Should ancillary equipment **14** stop generating an audio output signal, OR gate **68** will generate a logic 0 output, transistor switch **92** will turn off, and RC circuit **90** will discharge. The voltage on the capacitor in RC **90** circuit will decay over a user selected, or preselected time interval until it drops below the threshold required for comparator **94** to stay ON (i.e., to generate a logic 1 output). Comparator **94** will turn OFF (i.e., generate a logic 0 output) thereby turning OFF transistor switch **96** and subsequently turning OFF relay **16**.

If the user of desires to resume operation of equipment **10**, then a cycling of switch **22** from ON to OFF back to ON again will duplicate the aforementioned sequence of events, resulting in re-activation of ancillary equipment **14**.

Ancillary equipment **14** may also be immediately turned OFF by turning switch **22** to OFF. This results in a similar sequence of signals passing through switch debouncer **80**, differentiator **82**, amplifier **84**, rectifier **85** and monostable multivibrator **86**. Transistor switch **88** momentarily grounds the capacitor in RC circuit **90**, thereby turning OFF comparator **94**, then transistor switch **96** and ultimately relay **16**.

It will be understood that certain conventional elements, well known to those skilled in the art, which are necessary to implement the disclosed embodiments (such as certain wiring, buffers, inverters, switch debouncers, etc.) have not been described in detail to avoid obscuring the invention.

The present invention has been described in terms of a preferred embodiment. The invention, however, is not limited to the embodiment depicted and described. Rather, the scope of the invention is defined by the appended claims.

WHAT IS CLAIMED IS:

1. A device for automatically shutting off audio, audio/visual, or electronic musical instrument equipment generating an audio output signal, comprising:

means for detecting the presence of the audio output signal; and

means for shutting off power to the equipment if the audio output signal has not been detected for a predetermined period of time.

2. The device of claim 1 wherein the audio output signal is an analog signal.

3. The device of claim 1 wherein the audio output signal is a digital signal.

4. A method for controlling the supply of power to audio, audio/visual, or electronic musical instrument equipment generating an output signal with a variable level, the method comprising the steps of:

detecting the audio output signal;

beginning a timing operation if the level of the audio output signal falls below a predetermined threshold; and

shutting off the equipment if the level of the output signal does not rise above a predetermined threshold for a predetermined period of time.

5. The method of claim 4 wherein the output signal is an analog audio signal.

6. The method of claim 4 wherein the output signal is a digital audio signal.

7. A device for automatically shutting off audio, audio/visual, or electronic musical instrument equipment generating an audio output signal with a variable level, comprising:

means for detecting the audio output signal;

means for beginning a timing operation if the level of the audio output signal falls below a predetermined threshold; and

means for shutting off the equipment if the level of the audio output signal does not rise above a predetermined threshold for a predetermined period of time.

8. In audio, audio/visual, or electronic musical instrument equipment including a power supply, a user-controlled power switch, and ancillary equipment whose power state is normally controlled by the power switch, the ancillary equipment generating an audio output signal, an automatic shut off device comprising:

a power coupling device coupling the power supply to the ancillary equipment, the power coupling device having a first state in which power is transmitted to the ancillary equipment, and a second state in which power is not transmitted to the ancillary equipment;

a level detector coupled to the audio output signal, the level detector generating a first output if the level of the audio output signal is above a predetermined threshold, and generating a second output if the level of the audio output signal is below a predetermined threshold; and

a sequential circuit having inputs coupled to the power switch and to the level detector;

the sequential circuit having an output which controls the state of the power coupling device;

the sequential circuit configured such that its output will cause the power coupling device to be in its first state if the user has activated the power switch to turn on the audio, audio/visual, or electronic musical instrument equipment, and if the level detector has not generated its second output for more than a predetermined period of time;

the sequential circuit also configured such that its output will cause the power coupling device to be in its

LINKPLAY EXHIBIT 1002
Page 276 of 1292

second state if the user has activated the power switch to turn off the audio, audio/visual, or electronic musical instrument equipment, or if the level detector has generated its second output for more than a predetermined period of time.

9. The automatic shut off device of claim 8 wherein the sequential circuit includes both logic and memory elements.

10. The automatic shut off device of claim 8 wherein the sequential circuit includes a timer, a flip flop, and at least one logic gate.

11. The automatic shut off device of claim 8 wherein the user controlled power switch is a momentary contact switch.

12. The automatic shut off device of claim 8 wherein the sequential circuit includes an external clock.

13. The automatic shut off device of claim 8 wherein the sequential circuit includes an internal clock.

14. The automatic shut off device of claim 8 wherein the ancillary equipment generates a digital audio output signal.

15. The automatic shut off device of claim 8 wherein the ancillary equipment generates an analog audio output signal.

16. The automatic shut off device of claim 8 wherein the power coupling device is a relay.

17. The automatic shut off device of claim 8 wherein the power coupling device is a semiconductor device.

18. The automatic shut off device of claim 8 wherein the power coupling device is a transistor.

LINKPLAY EXHIBIT 1002
Page 277 of 1292

19. In audio, audio/visual, or electronic musical instrument equipment including a power supply, a user-controlled power switch, and ancillary equipment whose power state is normally controlled by the power switch, the ancillary equipment generating an audio output signal, an automatic shut off device comprising:

a power coupling device coupling the power supply to the ancillary equipment, the power coupling device having a first state in which power is transmitted to the ancillary equipment, and a second state in which power is not transmitted to the ancillary equipment;

means, coupled to the audio output signal, for generating a first output if the level of the audio output signal is above a predetermined threshold, and for generating a second output if the level of the audio output signal is below a predetermined threshold;

an RC circuit, coupled to the means for generating, in which the capacitor is quickly charged when the means for generating generates the first output, and in which the capacitor is slowly discharged when the means for generating generates the second output;

the RC circuit having an output voltage which controls the state of the power coupling device, the power coupling device being in its first state when the output voltage of the RC circuit is above a predetermined threshold, and the power coupling device being in its second state when the voltage of the RC circuit is below a predetermined threshold; and

means for quickly discharging the capacitor in the RC circuit, the means for quickly discharging activated if the user turns off the power switch.

20. The automatic shut off device of claim 19 wherein the user controlled power switch is a toggle switch.

21. The automatic shut off device of claim 19 wherein the ancillary equipment generates an analog audio output signal.

22. The automatic shut off device of claim 19 wherein the ancillary equipment generates a digital audio output signal.

23. The automatic shut off device of claim 19 wherein the power coupling device is a relay.

24. The automatic shut off device of claim 19 wherein the power coupling device is a semiconductor device.

25. The automatic shut off device of claim 19 wherein the power coupling device is a transistor.

26. In audio, audio/visual, or electronic musical equipment generating an audio output signal, and having a component which is generally in a powered on state when the audio output signal is being generated and which is generally in a powered off state when the audio output signal is not being generated, a device for automatically shutting off the audio or audio/visual equipment comprising:

means for detecting whether the component is in a powered on or powered off state; and

means for shutting off power to the equipment if the component is in a powered off state for a predetermined period of time.

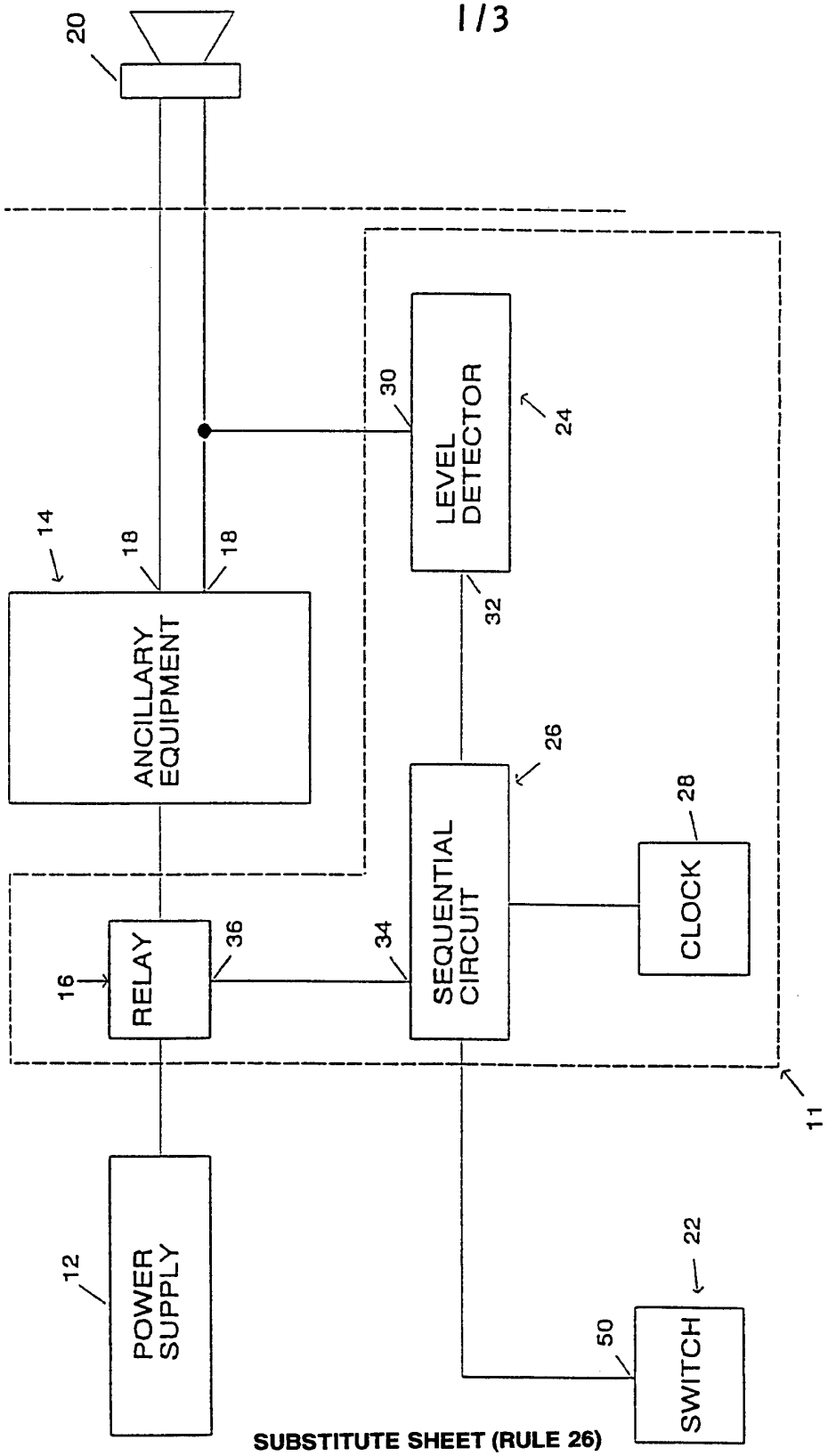

20
LEVEL DETECTOR
30
24
14
18
18
ANCILLARY EQUIPMENT
32
26
SEQUENTIAL CIRCUIT
28
CLOCK
16
RELAY
36
34
11
POWER SUPPLY
12
22
SWITCH
50

FIGURE 1

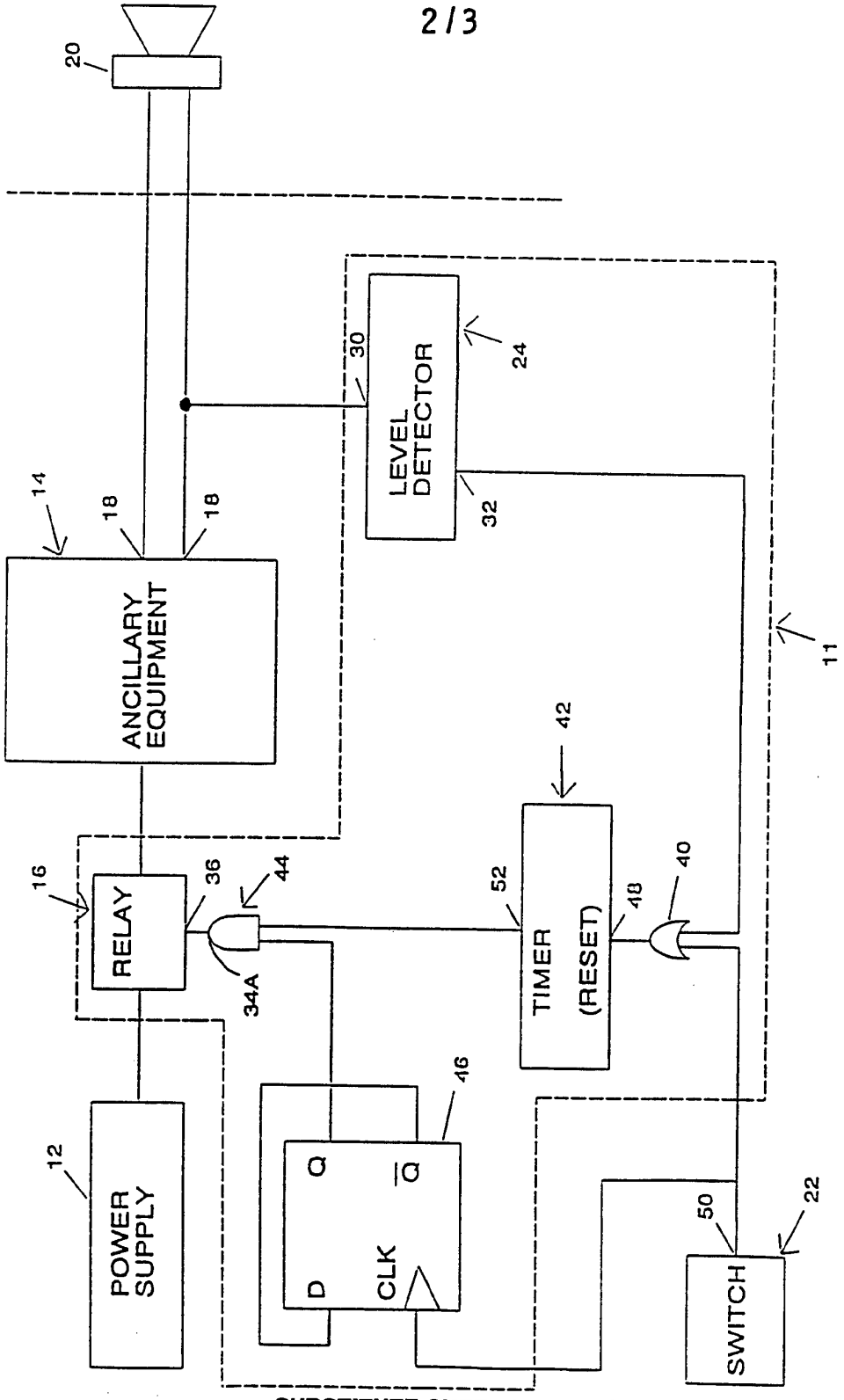

20
LEVEL DETECTOR
24
30
32
14
18
18
ANCILLARY EQUIPMENT
11
42
TIMER (RESET)
40
48
52
16
RELAY
36
44
34A
46
Q
$\overline{Q}$
D
CLK
12
POWER SUPPLY
50
22
SWITCH

FIGURE 2

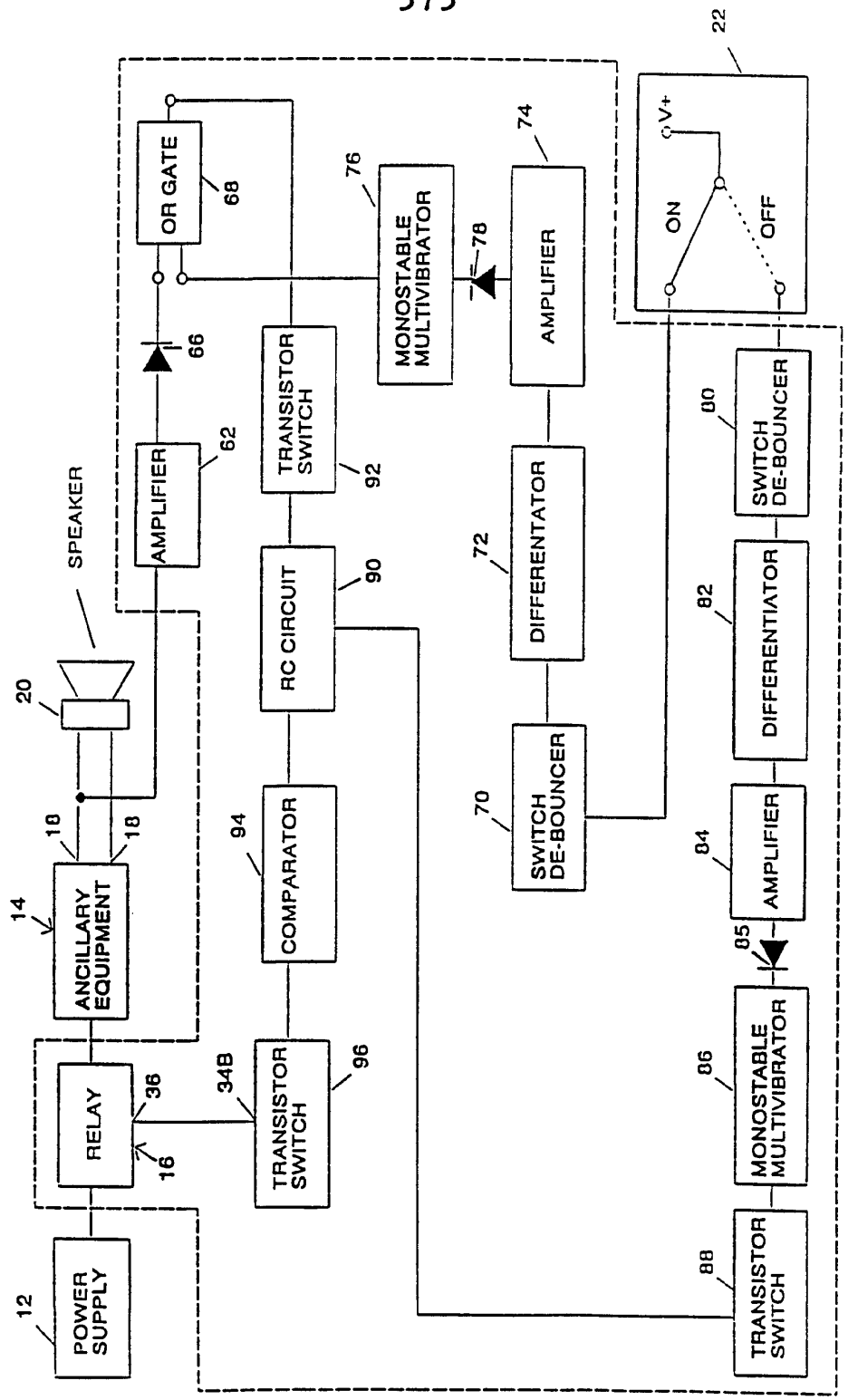


FIGURE 3

LINKPLAY EXHIBIT 1002
Page 282 of 1292

Espacenet

Bibliographic data: JP2005136457 (A) — 2005-05-26

MOBILE PHONE, REPRODUCING METHOD, AND PROGRAM

Inventor(s): KOIZUMI MICHIAKI; KIYOTA KENJI ± (KOIZUMI MICHIAKI, ; KIYOTA KENJI)

Applicant(s): SANYO ELECTRIC CO ± (SANYO ELECTRIC CO LTD)

Classification: **- international:** ***H04M1/00; H04M1/02; H04M1/21; H04M1/725; H04N5/64; H04R5/02; H04R5/04;*** (IPC1-7): H04M1/00; H04M1/02; H04M1/21; H04M1/725; H04N5/64; H04R5/02; H04R5/04

- cooperative:

Application number: JP20030366952 20031028 Global Dossier

Priority number(s): JP20030366952 20031028

Abstract of JP2005136457 (A)

PROBLEM TO BE SOLVED: To provide a mobile phone for carrying out a natural sound output to a user whereby the user can easily view a television broadcast program in accordance with the display form of an image in the case of receiving and reproducing the television broadcast wave. ;SOLUTION: The mobile phone is provided with: a reception means for receiving a television broadcast signal; a display section; two speakers arranged at both sides of the display section; and a sound output means for using the two speakers to reproduce the received sound as a stereoscopic signal when the two speakers are located to the left and right of a displayed image or using the speakers to reproduce the received sound as a monaural signal when the two speakers are located to upper and lower parts of the displayed image. ;COPYRIGHT: (C)2005,JPO&NCIPI

(19)日本国特許庁(JP)　(12)公開特許公報(A)　(11)特許出願公開番号
特開2005-136457
(P2005-136457A)
(43)公開日　平成17年5月26日(2005.5.26)

(51)Int.Cl.[7]		F I			テーマコード（参考）
H04R	5/04	H04R	5/04	Z	5D011
H04M	1/00	H04M	1/00	H	5K023
H04M	1/02	H04M	1/00	V	5K027
H04M	1/21	H04M	1/02	C	
H04M	1/725	H04M	1/21	Z	

審査請求 未請求　請求項の数 3　ＯＬ　（全 11 頁）　最終頁に続く

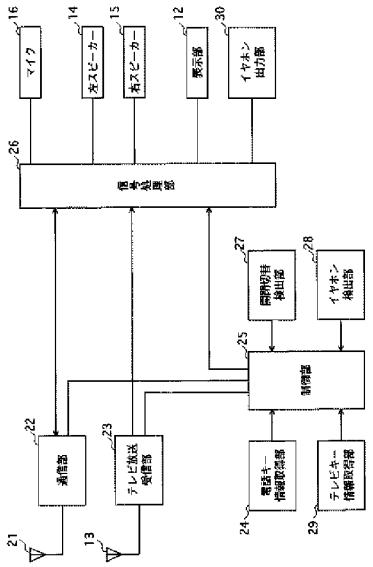
(21)出願番号　特願2003-366952(P2003-366952)
(22)出願日　平成15年10月28日(2003.10.28)

(71)出願人　000001889
三洋電機株式会社
大阪府守口市京阪本通２丁目５番５号
(74)代理人　100090446
弁理士　中島　司朗
(72)発明者　小泉　道明
大阪府大阪市北区野崎町７番８号梅田パークビル　株式会社新日本内
(72)発明者　清田　健二
大阪府大東市三洋町１番１号　三洋電機株式会社内

Ｆターム(参考)　5D011 AA02 AD02
5K023 AA07 BB11 DD08 HH07 LL06 MM20 MM25 PP16
5K027 AA11 BB02 HH29 MM17

(54)【発明の名称】携帯電話機、再生方法及びプログラム

(57)【要約】
【課題】　テレビ放送波を受信して再生する場合に、画像の表示形態に応じて、利用者に対し自然な音声出力がなされる、テレビ放送の視聴がしやすい携帯電話機を提供することを目的とする。
【解決手段】　携帯電話機であって、テレビ放送信号を受信する受信手段と、表示部と、表示部の両側に配された２つのスピーカと、前記２つのスピーカが表示画像の左右に位置する場合、受信音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが表示画像の上下に位置する場合、受信音声を前記２つのスピーカでモノラル再生する音声出力手段とを備える。
【選択図】　図３



【特許請求の範囲】
【請求項1】
テレビ放送信号を受信する受信手段と、
　前記テレビ放送信号中の映像を表示する表示部と、
　前記表示部の両側に配された２つのスピーカと、
　前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力手段と
　を備えることを特徴とする携帯電話機。
【請求項2】
表示部の両側に２つのスピーカを配した携帯電話機においてテレビ番組を再生する再生方法であって、
　テレビ放送信号を受信する受信ステップと、
　前記表示部により前記テレビ放送信号中の映像を表示する表示ステップと、
　前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力ステップと
　を含むことを特徴とする再生方法。
【請求項3】
表示部の両側に２つのスピーカを配した携帯電話機に適用されるプログラムであって、
　テレビ放送信号を受信する受信ステップと、
　前記表示部により前記テレビ放送信号中の映像を表示する表示ステップと、
　前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力ステップと
　の各ステップをコンピュータに実行させるプログラム。

【発明の詳細な説明】
【技術分野】
【0001】
　本発明は、テレビ放送波を受信して再生する携帯電話機に関し、特に音声モードを切替える技術に関する。
【背景技術】
【0002】
　近年、携帯電話機の多機能化が進み、例えばデジタルテレビ放送波を受信、再生する機能を備える携帯電話機も開発されている。
【0003】
　携帯電話機が備える液晶ディスプレイ等画面の形状はほとんどが縦長であり、デジタルテレビ放送波で送信される画像の多くは横長の形状を有するので、携帯電話機の一部機種は、前記画像を９０度回転させて表示し、前記液晶ディスプレイの表示領域を有効利用するモードを備えている（非特許文献１参照）。
【0004】
　一方、音声に関しては、デジタルテレビ放送においてはステレオ放送されるものがほとんどであり、ステレオ音声を適切に再生するためには、携帯電話機にスピーカを２つ備える必要がある。
【0005】
　ステレオ効果を得るために２つのスピーカを適度に離して配置すること及び一方のスピーカを前記縦長画面の上端外側に通常配置される通話用のスピーカと兼用することを考慮し、携帯電話機において、縦長画面の長手方向の両端外側にそれぞれ１つのスピーカを配置することが考えられている。
【非特許文献1】日経エレクトロニクス　２００３年８月１８日　日経ＢＰ社　Ｐ．９０

－９５
【発明の開示】
【発明が解決しようとする課題】
【0006】
しかしながら、前記携帯電話機は、テレビ放送受信時、上述のようには画像を９０度回転させずに画面に表示したい場合もあり、このような場合に受信した音声を単純にステレオ音声として出力すると、ステレオ音声の右音声が画像の上方から聞こえ、左音声が画像の下方から聞こえるといった利用者にとって不自然な音声出力がなされることとなる。
【0007】
上記の問題に鑑み、本発明は、テレビ放送を受信して再生する場合に、画像の表示形態に応じて、利用者に対し自然な音声出力がなされる、テレビ放送の視聴がしやすい携帯電話機を提供することを目的とする。
【課題を解決するための手段】
【0008】
上記課題を解決するために本発明は、携帯電話機であって、テレビ放送信号を受信する受信手段と、前記テレビ放送信号中の映像を表示する表示部と、前記表示部の両側に配された２つのスピーカと、前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力手段とを備える。
【発明の効果】
【0009】
（１）本発明の携帯電話機は、上述の構成を備えることにより、利用者から見て、表示する映像の左右にスピーカが位置する場合に、音声をステレオ出力するので、前記利用者は音声のステレオ効果を享受することができ、また表示する映像の左右以外の方向である上下方向等にスピーカが位置する場合、前記スピーカの少なくとも一方に音声をモノラル出力するので、映像の上方向からステレオ音声に係る右側音声、下方向からステレオ音声に係る左側音声を聞くといった不自然さや、聞き取りにくさを感じることなく、音声を聞くことができる。
【0010】
（２）本発明の再生方法は、表示部の両側に２つのスピーカを配した携帯電話機においてテレビ番組を再生する再生方法であって、テレビ放送信号を受信する受信ステップと、前記表示部により前記テレビ放送信号中の映像を表示する表示ステップと、前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力ステップとを含む。
【0011】
この構成によれば、利用者から見て、表示する映像の左右にスピーカが位置する場合に、音声をステレオ出力するので、前記利用者は音声のステレオ効果を享受することができ、また表示する映像の左右以外の方向である上下方向等にスピーカが位置する場合、前記スピーカの少なくとも一方に音声をモノラル出力するので、映像の上方向からステレオ音声に係る右側音声、下方向からステレオ音声に係る左側音声を聞くといった不自然さや、聞き取りにくさを感じることなく、音声を聞くことができる。
【0012】
（３）本発明のプログラムは、表示部の両側に２つのスピーカを配した携帯電話機に適用されるプログラムであって、テレビ放送信号を受信する受信ステップと、前記表示部により前記テレビ放送信号中の映像を表示する表示ステップと、前記２つのスピーカが前記映像の左右に位置する場合、前記テレビ放送信号中の音声を前記２つのスピーカでステレオ再生し、前記２つのスピーカが前記映像の上下に位置する場合、前記音声を前記２つのスピーカでモノラル再生する音声出力ステップとの各ステップをコンピュータに実行させ

る。
【0013】
この構成によれば、利用者から見て、表示する映像の左右にスピーカが位置する場合に、音声をステレオ出力するので、前記利用者は音声のステレオ効果を享受することができ、また表示する映像の左右以外の方向である上下方向等にスピーカが位置する場合、前記スピーカの少なくとも一方に音声をモノラル出力するので、映像の上方向からステレオ音声に係る右側音声、下方向からステレオ音声に係る左側音声を聞くといった不自然さや、聞き取りにくさを感じることなく、音声を聞くことができる。
【発明を実施するための最良の形態】
【0014】
本発明の最良の形態について、図を参照しながら説明する。
＜１．概要＞
図１は、本発明に係る携帯電話機１の概略を示す図である。
【0015】
携帯電話機１は、電話としての通話を行う電話機能に加え、テレビ放送波を受信するテレビ機能を備える。
【0016】
携帯電話機１の筐体は、表示部１２を備える第１筐体１０と、第１筐体１０に電気的に接続した第２筐体１１とから成る。
【0017】
携帯電話機１は、スライド開閉式の構造を有し、図１（ａ）に示す第１筐体１０と第２筐体１１とが全体的に重なった状態である閉状態と、図１（ｂ）に示す第１筐体１０が第２筐体１１上を平行移動した開状態との２状態を取る。
【0018】
図１（ａ）に示す第１筐体１０の一部であるスライド部２２には突状のレールが備わり、前記突状レールは、第２筐体１１に備わる溝２１と咬み合っており、溝２１に沿ってスライドする。
【0019】
溝２１の一端には、検出スイッチ２３が備わり、携帯電話機１が前記閉状態の場合には、前記突状レールが検出スイッチ２３を押下する。
【0020】
携帯電話機１は、検出スイッチ２３が押下されていない場合が、開状態であるとする。
【0021】
携帯電話機１の利用者は、電話機能を使用する場合やテレビ放送を簡易視聴する場合には、電話機能の操作に必要なキー等により多様な操作が可能であり、また把持し易い前記開状態で携帯電話機１を利用する。
【0022】
ここで、前記簡易視聴とは、テレビ放送を比較的短い時間視聴することであり、例えば、プロ野球中継における得点のチェック、数分間のニュースの視聴、現在放送中の番組をチェックするためのザッピング視聴等を指す。
【0023】
また、前記利用者は、プロ野球中継を試合終了まで見る、或いはテレビドラマを視聴する等、長時間に渡りテレビを視聴する場合には、携帯電話機１を前記閉状態にして使用する。
【0024】
図２は、携帯電話機１が、受信したテレビ放送を表示部１２に表示している様子を示す図である。
【0025】
図２（ａ）は、前記閉状態の携帯電話機１がテレビ放送を受信し、表示部１２にテレビ映像を映す様子を示している。

【0026】
図２（ｂ）は、前記開状態の携帯電話機１がテレビ放送を受信し、表示部１２にテレビ映像を映す様子を示している。
【0027】
表示部１２は、前記開状態においては、表示すべき情報を、縦長画面として表示し、前記閉状態においては、表示すべき情報を、横長画面として表示する。
【0028】
放送局からテレビ放送される映像は、アスペクト比が横長である映像であり、携帯電話機１は、図２（ａ）に示すように表示部１２一杯に映像を映すよう制御する。
【0029】
横長の映像を前記開状態の携帯電話機１で映す場合には、図２（ｂ）に示すように、前記映像を、図２（ａ）で表示部１２に映されている状態から９０度回転、縮小し、表示部１２に映すこととなり、画面一杯に映像を映すことなく、画面の表示領域を有効利用できない。
【0030】
また、前記利用者は、携帯電話機１を使用しない場合は、携帯電話機１を前記閉状態にしておく。
【0031】
第１筐体１０は、表示部１２と、アンテナ１３と、左スピーカ１４と、右スピーカ１５と、イヤホンジャック１８と、テレビキー２０とを備える。
【0032】
表示部１２は、受信しているテレビ放送や、電話機能による通話時に必要な情報等を表示する液晶ディスプレイ等である。
【0033】
アンテナ１３は、テレビ放送波を受信するアンテナであり、電話機能による通話を行うための無線を送受信するアンテナは、筐体に内蔵されているものとする。
【0034】
左スピーカ１４は、ステレオ音声の左音声や、モノラル音声の出力を行うためのスピーカである。
【0035】
右スピーカ１５は、ステレオ音声の右音声の出力を行うためのスピーカである。
【0036】
テレビキー２０は、当該携帯電話機１の利用者がテレビの視聴を行うために最低限必要なキーを集めたものであり、テレビ放送受信のオン、オフを切り替えるテレビ機能オンオフキー、受信チャネルを選択するためのチャネルアップダウンキー、テレビ音量の調整を行う音量アップダウンキー等から成る。
【0037】
第２筐体１１は、マイク１６と、電話キー１７とを備える。
【0038】
マイク１６は、通話時に、利用者が発する音声を集音する。
【0039】
電話キー１７は、通話先の電話番号を入力するためのテンキーや、オンフックキー、オフフックキーなど通話を行うのに必要なキーから成り、前記テンキーは、テレビ機能がオンになっている場合にはテレビ放送受信時のチャネル番号の入力など、テレビの視聴を行うためのキーとしても使用される。
【0040】
イヤホンジャック１８には、図１（ｂ）に示すようにイヤホン１９の接続が可能である。
【0041】
イヤホンジャック１８は、イヤホンが接続された場合及び接続されたイヤホンが抜かれ

た場合を検出し、また、接続されたイヤホンが、ステレオ用であるかモノラル用であるかを前記イヤホンの接続端子の形状等により識別する。

＜２．構成＞

図３は、携帯電話機１の内部構成を示すブロック図である。

【0042】

表示部１２は、信号処理部２６から入力される、赤色出力信号、緑色出力信号、青色出力信号と、水平、垂直の各同期信号とに基づき、映像表示を行う。

【0043】

通信部２２は、アンテナ２１を介して、携帯電話機に関する基地局（図示せず）と、通話のための無線通信を行う。

【0044】

通信部２２は、受信した信号を復調した結果である音声信号を、信号処理部２６に送信する。

【0045】

テレビ放送受信部２３は、地上波デジタル放送チューナであり、チューナ、復調、誤り訂正、デスクランブル、多重信号分離、復号部、ＤＡコンバータ等から成る。

【0046】

テレビ放送受信部２３は、アンテナ１３を介して、放送局（図示せず）が送信した放送波を受信し、受信した放送波から復号した画像フレーム情報、音声信号を信号処理部２６に出力する。

【0047】

電話キー情報取得部２４は、前記利用者が電話キー１７を押下したことを検出し、押下されたキーに対応する電話キー情報を取得する。

【0048】

信号処理部２６は、前記利用者が通話している場合、通信部２２から受信した音声信号を、増幅処理を施した後、左スピーカ１４に出力する。

【0049】

また、信号処理部２６は、マイク１６が集音した入力音声を増幅処理し、通信部２２、アンテナ２１を介して、前記基地局に送信する。

【0050】

信号処理部２６は、前記利用者がテレビ放送を視聴する場合、テレビ放送受信部２３から受信した映像信号を、前記映像信号を表示部１２に表示させる。

【0051】

信号処理部２６は、制御部２５からの出力制御指示により、前記左音声信号と前記右音声信号とを、左スピーカ１４と右スピーカ１５とを用いて出力するか、又は前記左音声信号と、前記右音声信号とを合成してモノラル音声とし、左スピーカ１４に出力する。

【0052】

信号処理部２６は、ＶＲＡＭ（Ｖｉｄｅｏ　Ｒａｎｄｏｍ　Ａｃｃｅｓｓ　Ｍｅｍｏｒｙ）とワークＲＡＭとを備える。

【0053】

信号処理部２６は、テレビ放送受信部２３から画像フレーム情報を取得する。

【0054】

前記画像フレーム情報は、例えば、ビットマップのように１枚の画像を符号化したものである。

【0055】

信号処理部２６は、取得した画像フレーム情報を、ＶＲＡＭへ書き込む。

【0056】

但し、信号処理部２６は、制御部２５から画像を９０度回転させるよう指示を受けている場合には、前記受信した画像フレーム情報が示す画像を９０度回転させた画像をワークＲＡＭを用いて生成し、前記回転させた画像フレーム情報を前記ＶＲＡＭに展開する。

【0057】
信号処理部２６は、前記ＶＲＡＭ中の情報に対応する、赤出力信号、緑出力信号、青出力信号と、同期信号とを表示部１２に出力する。
【0058】
開閉切替検出部２７は、検出スイッチ２３が押下されている場合に、携帯電話機１が前記閉状態であると判定し、押下されていない場合には携帯電話機１が前記開状態であると判定し、携帯電話機１のテレビ機能がオンされた場合と、携帯電話機１が前記閉状態から前記開状態に変わった場合と、前記開状態から前記閉状態に変わった場合とに、制御部２５に対し携帯電話機１が閉状態と開状態のいずれであるかを示す開閉情報を送信する。
【0059】
また、開閉切替検出部２７は、携帯電話機１の電源がオンになった場合にも、携帯電話機１が開状態と閉状態のいずれであるかを検出し、検出結果を開閉情報として、制御部２５に対し出力する。
【0060】
イヤホン検出部２８は、イヤホンジャック１８にイヤホンが接続された場合及び接続されたイヤホンが抜き取られた場合に、イヤホンが接続されているか否か、接続されている場合には当該イヤホンがステレオ音声用であるかアナログ音声用であるかを判定し、前記判定結果に基づきイヤホン無、ステレオ、アナログのいずれかを示すイヤホン情報を、制御部２５に出力する。
【0061】
また、イヤホン検出部２８は、携帯電話機１の電源がオンになった場合にも、上述の通りイヤホンの接続有無、接続されたイヤホンの種類を判定し、判定結果をイヤホン情報として、制御部２５に対し送信する。
【0062】
テレビキー情報取得部２９は、前記利用者によるテレビキー２０の押下を検出し押下されたキーに対応するテレビキー情報を取得する。
【0063】
イヤホン出力部３０は、信号処理部２６から出力される音声信号を、イヤホンジャック１８に接続されたイヤホンに対し、出力する。
【0064】
制御部２５は、開閉切替検出部２７から取得する開閉情報と、イヤホン検出部２８から取得するイヤホン情報とから、音声モード判定処理を行い、判定結果を出力制御情報として、信号処理部２６に出力する。
【0065】
前記音声モード判定処理については、後述する。
【0066】
制御部２５は、受信したテレビキー情報に基づき、テレビ放送受信部２３に対するチューニングの指示、信号処理部２６に対する音声出力のゲイン調整指示、テレビ放送に係る映像の出力指示等を行う。
【0067】
制御部２５は、受信したキー情報に応じて、電話機能を動作させるため、通信部２２に対し無線通信を行うよう指示する。
【0068】
制御部２５は、携帯電話機１の主電源がオンされた場合には、イヤホン情報、開閉情報を、初期値として取得しておく。
＜３．動作＞
制御部２５は、音声モード判定処理を、（ａ）テレビ機能がオフからオンに変更された場合、（ｂ）イヤホンの接続、抜き取りを検出した場合、（ｃ）携帯電話機１の開閉状態が変更された場合の３つの場合に行う。
【0069】

図４は、音声モード判定処理の内容を示すフローチャートである。

【0070】

制御部２５は、前記イヤホン情報がステレオ或いはモノラルを示すか否かを判定する（Ｓ４０１）。

【0071】

制御部２５は、前記イヤホン情報がイヤホン無を示す場合（Ｓ４０１：ＮＯ）、Ｓ４０２に進む。

【0072】

制御部２５は、前記イヤホン情報がステレオ或いはモノラルを示す場合（Ｓ４０１：ＹＥＳ）、左スピーカ１４及び右スピーカ１５への音声出力を停止するスピーカミュートを示す出力制御指示を信号処理部２６に送信し（Ｓ４０５）、前記イヤホン情報がステレオを示す場合（Ｓ４０６：ＹＥＳ）、イヤホンステレオ出力を示す出力制御指示を信号処理部２６に送信する（Ｓ４０７）。

【0073】

前記イヤホン情報がモノラルを示す場合（Ｓ４０６：ＮＯ）、イヤホンモノラル出力を示す出力制御指示を信号処理部２６に対し送信する（Ｓ４０８）。

【0074】

制御部２５は、前記開閉情報が開状態を示す場合（Ｓ４０２：ＹＥＳ）、信号処理部２６に対し左スピーカモノラル出力を示す出力制御指示を出力する（Ｓ４０４）。

【0075】

前記開閉状態が閉状態を示す場合（Ｓ４０２：ＮＯ）、信号処理部２６に対し、両スピーカステレオ出力を示す出力制御指示を信号処理部２６に対し出力する（Ｓ４０３）。

【0076】

なお、制御部２５は、電話機能がオンになった場合には、イヤホン情報がイヤホン無しを示すか否かを判定する。

イヤホン情報が、イヤホン無しを示す場合左スピーカ出力を示す出力制御情報を信号処理部２６に対し送信し、イヤホン情報がモノラル及びステレオを示す場合には、イヤホンモノラル出力を示す出力制御指示を信号処理部２６に対し送信する。

【0077】

信号処理部２６は、制御部２５から受信した出力制御指示に従い、音声出力を行う。

＜４．変形例＞

なお、本発明を上記の実施の形態に基づいて説明してきたが、本発明は、上記の実施の形態に限定されないのはもちろんである。

以下のような場合も本発明に含まれる。

【0078】

本発明について、スライド式で開閉する携帯電話機の例で説明してきたが、映像を所定の角度回転させるなどしてスピーカの位置と、映像の上下との対応関係が変化するように構成されてあれば、本発明の適用は可能である。

【0079】

図５は、回転式構造を有する携帯電話機の概略を示す図である。

【0080】

例えば、図５（ａ）及び（ｂ）に示す携帯電話機のように、第１筐体１０１が、第２筐体１０２に対して９０度回転する回転式の構造を有してもよい。

【0081】

図５に示す携帯電話機においては、第１筐体１０１が回転したような図５（ａ）で示した状態が前記閉状態に相当し、左スピーカ１０４及び右スピーカ１０５が、ステレオ音声を出力する。

【0082】

図５（ｂ）で示した状態は前記開状態に相当し、ステレオ音声をモノラル音声に変換した後、左スピーカ１０４又は右スピーカ１０５の少なくとも一方から前記モノラル信号を

出力する。

【0083】

また、水平及び垂直ジャイロセンサーにより、携帯電話機の姿勢を検出し、利用者から見て、２つのスピーカが表示部の左右に位置する場合と、表示部の上下に位置する場合とを検出する構成としてもよい。

【図面の簡単な説明】

【0084】

【図1】本発明に係る携帯電話機１の概略を示す図である。

【図2】携帯電話機１が、テレビ放送を受信し、表示部１２に表示している様子を示す図である。

【図3】携帯電話機１の内部構成を示すブロック図である。

【図4】音声モード判定処理の内容を示すフローチャートである。

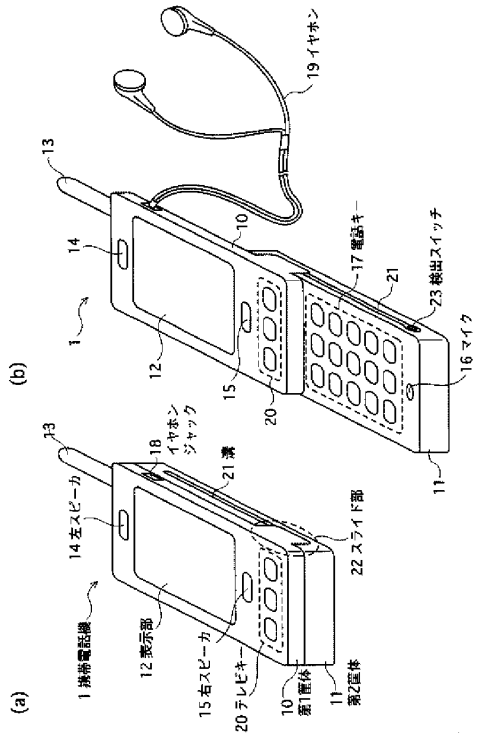
【図5】回転式構造を有する携帯電話機の概略を示す図である。

【符号の説明】

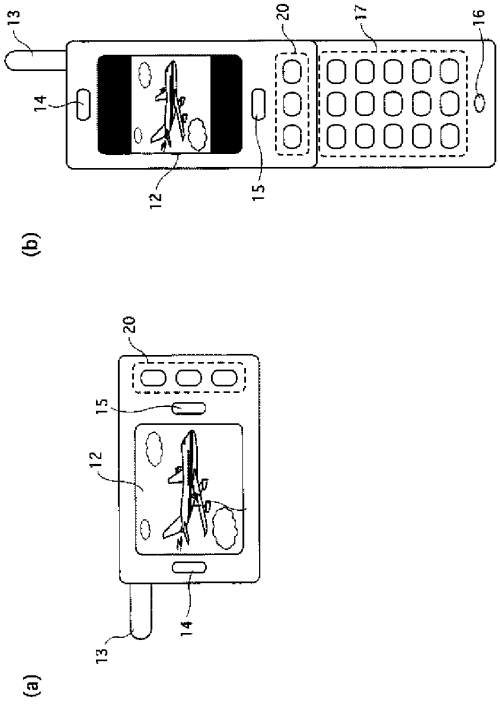
【0085】

１　携帯電話機
１０　第１筐体
１１　第２筐体
１２　表示部
１４　左スピーカ
１５　右スピーカ
１７　電話キー
２０　テレビキー
２１　溝
２３　検出スイッチ

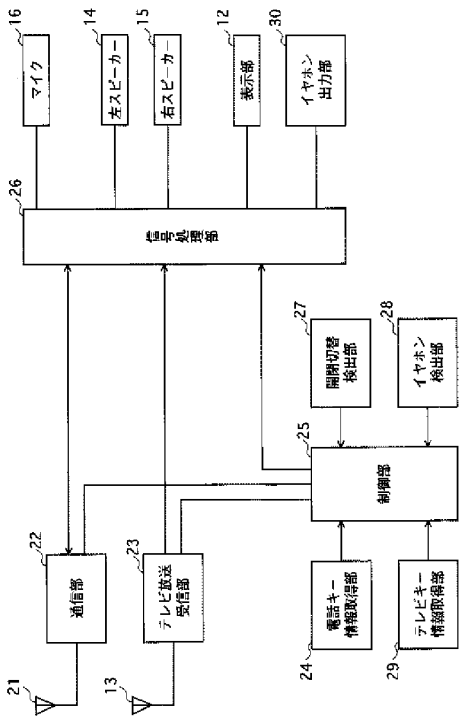
【図1】



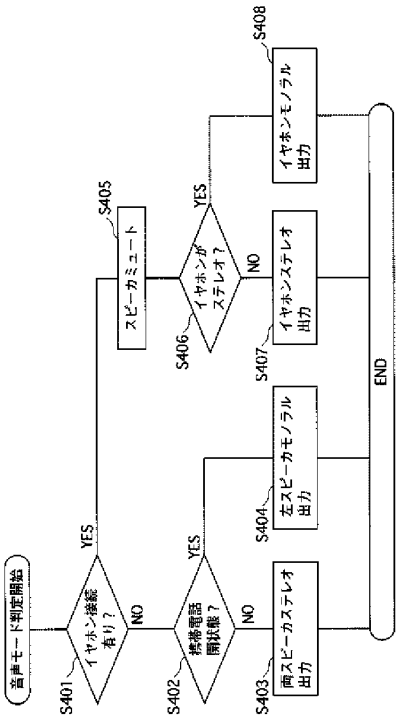
【図2】



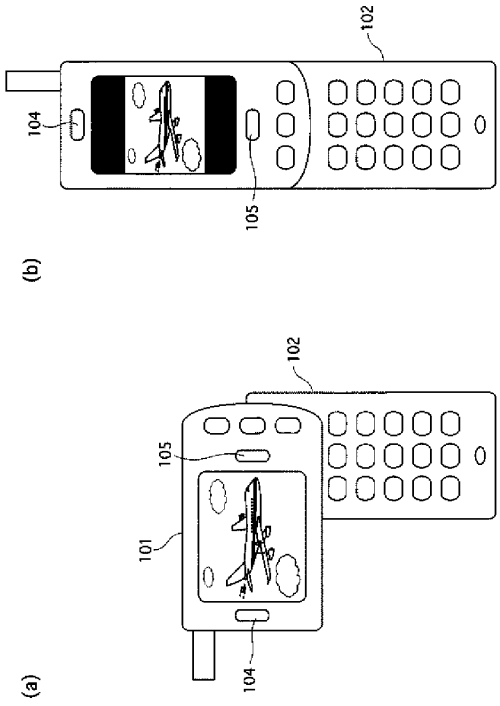
【図3】


マイク
左スピーカー
右スピーカー
表示部
イヤホン出力部
音声処理部
開閉切替検出部
イヤホン検出部
制御部
通信部
テレビ放送受信部
電話キー情報取得部
テレビキー情報取得部
16
14
15
12
30
26
27
28
25
22
23
21
13
24
29

【図4】


音声モード判定開始
イヤホン接続有り？
スピーカミュート
イヤホンがステレオ？
携帯電話開状態？
両スピーカステレオ出力
左スピーカモノラル出力
イヤホンステレオ出力
イヤホンモノラル出力
END
YES
NO
S401
S402
S403
S404
S405
S406
S407
S408

【図5】


(b)
(a)
102
104
105
101

(51)Int.Cl.⁷	FI			テーマコード（参考）
Ｈ０４Ｒ　5/02	Ｈ０４Ｍ	1/725		
// Ｈ０４Ｎ　5/64	Ｈ０４Ｒ	5/02	Ｚ	
	Ｈ０４Ｎ	5/64	５３１	
	Ｈ０４Ｎ	5/64	５４１Ｎ	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Docket No. 11-0403-CON1018)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2656**
Serial No.: 16/166,518	)	
	)	
Filed: October 22, 2018	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7844	)	
	)	
For: Networked Playback Device	)	

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: November 25, 2019

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

Electronic Patent Application Fee Transmittal				
Application Number:	16166518			
Filing Date:	22-Oct-2018			
Title of Invention:	Networked Playback Device			
First Named Inventor/Applicant Name:	Nicholas A.J. Millington			
Filer:	Brandon Jacob Kennedy/Jaden Knosher			
Attorney Docket Number:	11-0403-CON1018 (15-1433)			
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:	37853749
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Brandon Jacob Kennedy
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	26-NOV-2019
Filing Date:	22-OCT-2018
Time Stamp:	16:18:01
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	E2019APG18304036
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)	11-0403-CON1018_0_IDS_20191125150322.pdf	1054830 69ee6e54847e97a9027e5c37a6e2060fef50e3c2	no	7
Warnings:					
Information:					
2	Foreign Reference	CN101212827A.pdf	1532531 db840ed1ebba8172c02bb1a96a92e2bae0c4c5cc	no	17
Warnings:					
Information:					
3	Foreign Reference	EP2978240A1.pdf	3222580 e79eb4ae629491c31ac47b207ac661f77f479330	no	37
Warnings:					
Information:					
4	Foreign Reference	CN101053152A.pdf	7866856 49c7ef54d6501acdf53ebaa55b4286d00f79b1c3	no	67
Warnings:					
Information:					
5	Foreign Reference	CN101320292A.pdf	1822518 f791f9256805a2b52b1c1bbd6fbf3282bc8cce8c	no	17
Warnings:					
Information:					
6	Non Patent Literature	2017100760465_CN_OA_11-05-01-CN-DIV_2-22-19_15pages.pdf	928068 5dab6639675e382cdba44172652 91bc3a23bc2bf	no	15
Warnings:					
Information:					

7	Non Patent Literature	2016108175588_CN_OA_11-04 03-CN-DIV_3-12-19_17pages. pdf	1072466 5cd901d3c03fd9ddadda277e0551fa4c9ba 9caa9	no	17
Warnings:					
Information:					
8	Foreign Reference	CN1669240A.pdf	3003262 c7de8b93d9ba05a0a773e2a5b5f5a3de8b6 24f76	no	25
Warnings:					
Information:					
9	Foreign Reference	CN101501775A.pdf	4142970 56f19147a0423e4c6a8d600c65b87970061 ce515	no	40
Warnings:					
Information:					
10	Foreign Reference	CN101127987A.pdf	2509900 15684acbb028162381a496ca263592efa68 3fbe8	no	19
Warnings:					
Information:					
11	Foreign Reference	WO9709756A2.pdf	2241998 a68831fab8827bd3e7c3a29f3b8047f8780f 8b76	no	22
Warnings:					
Information:					
12	Non Patent Literature	Bluesound_Answer_10-14-19_ 66pages.pdf	1356492 56f34b470e08ebed160308d3f675acc9acb 1ab6c	no	66
Warnings:					
Information:					
13	Non Patent Literature	Bluesound_Answer_Exhibit_A_ 10-14-19_3pages.pdf	700504 bea13eb9a07e0e20c0b0a7f80108261c286 686a9	no	3
Warnings:					
Information:					

14	Non Patent Literature	Bluesound_Answer_Exhibit_D_10-14-19_36pages.pdf	1070335 5a7d0c1e97c71bb9904a88df82603ab7a315f629	no	36
Warnings:					
Information:					
15	Non Patent Literature	Bluesound_Answer_Exhibit_E_10-14-19_21pages.pdf	581432 10f01327e22a98696e228012522b887f50b2e02c	no	21
Warnings:					
Information:					
16	Non Patent Literature	Bluesound_Answer_Exhibit_C_10-14-19_16pages.pdf	295512 79d8692548c632db0a5acd2ae8791191895938a3	no	16
Warnings:					
Information:					
17	Non Patent Literature	Chertov_IPR_Declaration_re_US8942252.pdf	1061538 24a45c46818f0337fbb840e3d250ba2918fda553	no	81
Warnings:					
Information:					
18	Non Patent Literature	Chertov_IPR_Declaration_re_US7391791.pdf	1315231 a09035be3c9f1b7d4535c44b8916ae2d925b74ed	no	92
Warnings:					
Information:					
19	Non Patent Literature	2019001932_JP_OA_11-0501-JP-DIV3_10-29-19_6pages.pdf	655807 ed2f901d2be62d61b13d88319309805ecc6d83b8	no	6
Warnings:					
Information:					
20	Foreign Reference	JP2005136457A.pdf	642634 96be5e4cf52b93571538fc0aca6a8f2cf84abbd4	no	12
Warnings:					
Information:					

21	Non Patent Literature	Bluesound_First_Amended_Answer.pdf	1317454 9ebf190de9e7198eb282fa710e55437a5f286ffb	no	66
Warnings:					
Information:					
22	Non Patent Literature	2017100760465_CN_OA_11-0501-CN-DIV_11-4-19_18pages.pdf	2081961 d39f3dc45b8a9c17b44833734bc32599f7ccf860	no	18
Warnings:					
Information:					
23	Transmittal Letter	IDS_Transmittal.pdf	83134 c37e51c49f16f686a4271c6039d2ed0b6730818c	no	1
Warnings:					
Information:					
24	Fee Worksheet (SB06)	fee-info.pdf	30529 bbcbe7e5ef88fbf1e7cfb71d5bf721329bce071e	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	40590542	

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)	7844

107361 7590 10/16/2019

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

EXAMINER	
MCCORD, PAUL C	

ART UNIT	PAPER NUMBER
2656	

MAIL DATE	DELIVERY MODE
10/16/2019	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.** 16/166,518	**Applicant(s)** Millington et al.	
	Examiner PAUL C MCCORD	**Art Unit** 2656	**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 1/14/19.

☐ 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 10/22/18 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.

DETAILED ACTION

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process... may obtain a patent therefor..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the claims that are directed to the same invention so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 1,9,16 is/are rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 8938312. This is a statutory double patenting rejection. Particularly the claims of the instant application and the '312 patent are substantially similar as shown:

16166518	8938312
A system, method, etc. for: arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;	A system, method, etc. operable in response to determining that the first audio signal is no longer present at the line-in connector, arm the playback device such

	that a subsequent presence of the first audio signal at the line-in connector causes the playback device to play the first audio signal.
after arming the playback device, playing the second type of media content;	i) cease playback of a second audio signal being played by the playback device, wherein the second audio signal is not present at the line-in connector, and (ii) cause the playback device to play the first audio signal;
while playing the second type of media content, determining that the playback device is receiving the first type of media content; in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;	determine whether the first audio signal is present at the line-in connector; in response to determining that the first audio signal is present at the line-in connector, (i) cease playback of a second audio signal being played by the playback device, and (ii) cause the playback device to play the first audio signal;
determining that the playback device is no longer receiving the first type of media content; and in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent	in response to determining that the first audio signal is no longer present at the line-in connector, arm the playback device such that a subsequent presence of the first audio signal at the line-in connector causes the playback device to play the first audio signal.

receipt of the first type of media content preempts playback of the second type of media content.	

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.

This application currently 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).

1. Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Ando: 20040239816 further in view of Lambourne: 7571014 hereinafter Lam and further in view of Slemmer: 20060029005.

2. Regarding claim 1, 9, 16

Ando teaches:

A playback device comprising: one or more processors; and tangible, non-transitory computer readable memory comprising instructions stored therein, wherein the instructions, when executed, cause the playback device to perform a method (Ando: ¶ 25-30: Fig 1, 3: processor 11 functional to determine presence of a signal and selectively switch an input based upon presence of an input or user preference of a plurality of sensed input) comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content after arming the playback device, playing the second type of media content; while playing the second type of media content, determining that the playback device is receiving the first type of media content (Ando: ¶ 25-30: Fig 1, 3: processor 11 functional to determine presence of a signal and selectively switch an input based upon presence of an input or user preference of a plurality of sensed input; system plays media

present at a particular input until a media playback is present/detected at a particular sensed device or upon a particular input);

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content (Ando: Fig 3: ST5 stops playback from a particular sensed device based upon user explicit instructions or set preferences effectively preempting the playback of a particular media upon a determined presence of an additional media); determining that the playback device is no longer receiving the first type of media content (Ando: Fig 3: ST5 stops playback from a particular sensed device based upon user explicit instructions or set preferences); and in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content (Ando: ¶ 25-30: Fig 1, 3: processor 11 functional to determine presence of a signal and selectively switch an input based upon presence of an input or user preference effectively preempting the playback of a particular media upon a determined presence of an additional media).

Ando discusses input detection among plural AV apparatus but does not explicitly discuss the type of plural input connections necessary to the detection and re-sensing of a signal which operates to output media, reconfigure input sensing and thereby configure and/or reconfigure a plurality of playback devices in response to determining the Ando determinations of presence or absence of signals at an input.

In a related field of endeavor Lam teaches:

A digital audio network comprising an audio management system consisting of plural inputs including playback devices comprising analog inputs (Lam: Col 6:5-7:23; Fig 1, 2A, 2C) and

digital inputs (Lam: Col 6:5-7:23; Fig 1, 2A, 2C) wherein the system functions to select a particular input and communicate the audio therefrom to a plurality of networked speakers dispersed over plural selectively grouped zones of playback devices (Lam: Col 6:5-7:23; Fig 1, 2A, 2C) in a manner operable to output multiple channels of input audio from a plurality of networked speakers (Lam: Col 6:5-7:23; Fig 1, 2A, 2C, 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to operate the networked speaker system of Lam in concert with input detection functional to select input audio as taught or suggested by Ando. The average skilled practitioner would have been motivated to do so for the purpose of automatically configuring a digital audio network based on presence of an input, said sensed at a particular input and would have expected predictable results therefrom.

Ando in view of Lam teaches input detection within a configurable playback system functional to detect the absence of a signal to re-sense or otherwise reconfigure input sensing but does not explicitly teach configuring a plurality of playback devices in response to determining the presence or absence of signals at an input and reconfiguring or re-arming of the system to respond again to a signal at the line input after an instruction is received to stop playback and in response to the determination that a signal is no longer present at the line input.

In a related field of endeavor Slemmer teaches:

A system method and medium bearing coded instructions for aggregating device interaction among a plurality of playback devices (Slemmer: Abstract: Fig 1, 2, 3) wherein a state change such as an active signal input at a first device (Slemmer: ¶ 52) functions to consult a set of configuration rules associating particular second, third etc. device states with the state change of the first device (Slemmer: ¶ 65-71; Fig 8, 9) A second state change at a first device functions to rearm or reconfigure the system under direction of the state change . It would have

been obvious to one of ordinary skill in the art at the time of the invention to iterate among system configurations based upon state changes as taught or suggested by Slemmer in concert with the input detection and response taught or suggested by Ando in view of Lam. The average skilled practitioner would have been motivated to do so for the purpose of aggregating rules directing state changes within a plurality of playback devices in an audio environment and would have expected predictable results therefrom.

3. Regarding claim 2, 10, 17

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector (Ando: ¶ 25-30: Fig 1, 3); (Lam: Col 6:5-7:23; Fig 1, 2A, 2C).

4. Regarding claim 3, 11, 18

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface (Ando: ¶ 25-30: Fig 1, 3: wired input); (Lam: Col 6:5-7:23; Fig 1, 2A, 2C: media provided to output devices via wired or wireless interfaces).

5. Regarding claim 4, 19

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein playing the second type of media content comprises playing the second type of media content in synchrony with a second playback device (Lam: Abstract: Col 6:5-7:23; Fig 1, 2A, 2C: system operates to provide synchronous audio output from a constellation of playback devices).

6. Regarding claim 5, 12, 20

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source (Lam: Abstract: Col 5:1-7:23; Fig 1, 2A, 2C: system operates to receive audio from a wired or wireless network including internet accessible audio provides, routes, etc. said audio to a constellation of playback devices for synchronous audio output).

7. Regarding claim 6, 13

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein playing the second type of media content comprises transmitting at least a portion of the second type of media content to a third playback device (Lam: Abstract: Col 5:1-7:23; Fig 1, 2A, 2C: system operates to receive audio from a wired or wireless network including internet accessible audio and analog audio input to a particular analog input device wherein said particular device provides, routes, etc. said input analog audio to an additional device among a constellation of playback devices for synchronous audio output).

8. Regarding claim 7, 14

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein playing the first type of media content comprises transmitting at least a portion of the first type of media content to at least one of a second playback device or a third playback device (Lam: Abstract: Col 5:1-7:23; Fig 1, 2A, 2C: system operates to receive audio from a wired or wireless network including internet accessible audio and analog audio input to a particular analog input device

wherein said particular device provides, routes, etc. said input analog audio to an additional device among a selected groupings of playback devices for synchronous audio output)..

9. Regarding claim 8, 15

Ando in view of Lam in view of Slemmer teaches or suggests:

A playback device, method and coded instructions therefor, wherein the first type of media content comprises media content received from a video device (Ando: HDMI signal input from a plurality of input devices including video and audio input in concert with HDMI standards (And: ¶ 15-20, 32-34; Fig 1).

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, Curtis Kuntz can be reached on (571) 272-7499. 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 2656

Notice of References Cited	Application/Control No. 16/166,518	Applicant(s)/Patent Under Reexamination Millington et al.	
	Examiner PAUL C MCCORD	Art Unit 2656	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-20040239816-A1	12-2004	Ando, Morio	H04N5/4401	348/705
*	B	US-7571014-B1	08-2009	Lambourne; Robert A.	H04R27/00	700/94
*	C	US-20060029005-A1	02-2006	Slemmer; John B.	H04L12/2805	370/270
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	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	
	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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	**Art Unit**
	PAUL C MCCORD	2656

✓	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	10/14/2019								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	16/166,518	Millington et al.
	Examiner	Art Unit
	PAUL C MCCORD	2656

CPC - Searched*		
Symbol	Date	Examiner

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* 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
Inventor name search	10/14/2019	pm
East text search CPC and USPC databases	10/14/2019	pm
Google patent search	10/14/2019	pm
IP.com patent search	10/14/2019	pm

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/PAUL C MCCORD/ Primary Examiner, Art Unit 2656	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	LOUDERBACK, Jim, "Affordable Audio Receiver Furnishes Homes With MP3," TechTV Vault. 28 June 2000 retrieved 10 July 2014, 2 pages.	
	2	MediaRenderer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	3	MediaServer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	4	Microsoft, Universal Plug and Play (UPnP) Client Support ("Microsoft UPnP") (August 2001) (D+M_0402007-24) (18 pages).	
	5	Microsoft Window's XP Reviewer's Guide (August 2001) (D+M_0402225-85) (61 pages).	
	6	"Microsoft Windows XP File and Printer Share with Microsoft Windows" Microsoft Windows XP Technical Article, 2003, 65 pages.	
	7	"Model MRC44 Four Zone - Four Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2002, 52 pages.	
	8	"SMPTE Made Simple: A Time Code Tutor by Timeline," 1996, 46 pages.	
	9	Network Time Protocol (NTP), RFC 1305 (Mar. 1992) (D+M_0397417-536) (120 pages).	
	10	"NexSys Software v.3 Manual," Crest Audio, Inc., 1997, 76 pages.	
	11	NIEDERST, JENNIFER "O'Reilly Web Design in a Nutshell," Second Edition, September 2001, 678 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/684927, filed 13 April 2015, 10 pages.	
	13	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/813961, filed 30 July 2015, 10 pages.	
	14	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2014, 16 pages.	
	15	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 13 pages.	
	16	Non-Final Office Action mailed on 11 September 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 11 pages.	
	17	Non-Final Office Action mailed on 24 April 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 11 pages.	
	18	Non-Final Office Action mailed on 25 September 2013, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	19	Notice of Allowance mailed on 01 October 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 14 pages.	
	20	Notice of Allowance mailed on 10 April 2015, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 16 pages.	
	21	Notice of Allowance mailed on 16 February 2017, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	
	22	Notice of Allowance mailed on 18 August 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	Notice of Allowance mailed on 22 March 2017, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 7 pages.	
	24	Notice of Allowance mailed on 27 August 2018, issued in connection with U.S. Patent Application No. 15/583553, filed on 1 May 2017, 7 pages.	
	25	Notice of Allowance mailed on 28 June 2017, issued in connection with U.S. Patent Application No. 14/813961, filed on 30 July 2015, 7 pages.	
	26	Notice of Allowance mailed on 28 September 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 10 pages.	
	27	Notice of Allowance mailed on 30 June 2017, issued in connection with U.S. Patent Application No. 14/684927, filed on 13 April 2015, 8 pages.	
	28	Notice of Allowance mailed on 5 November 2018, issued in connection with U.S. Patent Application No. 15/688204, filed on 28 August 2017, 7 pages.	
	29	Notice of Incomplete Re-Exam Request mailed on 25 May 2017, issued in connection with U.S. Patent Application No. 90/013959 , filed on 01 April 2016, 10 pages.	
	30	Office Action in Ex Parte Reexamination mailed on 20 October 2017, issued in connection with U.S. Patent Reexamination Application No. 90/013959, filed on 16 June 2017, 50 pages.	
	31	Palm, Inc., "Handbook for the Palm VII Handheld," May 2000, 311 pages.	
	32	Parasound Zpre2 Zone Preamplifier with PTZI Remote Control, 2005, 16 pages.	
	33	PILLAI et al., "A Method to Improve the Robustness of MPEG Video Applications over Wireless Networks," Kent Ridge Digital Labs, 2000, 15 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Presentations at WinHEC 2000, May 2000, 138 pages.	
	35	Proficient Audio Systems M6 Quick Start Guide, 2011, 5 pages.	
	36	Proficient Audio Systems: Proficient Editor Advanced Programming Guide, 2007, 40 pages.	
	37	Programming Interface for WL54040 Dual-Band Wireless Transceiver, AVAGO0066, Agere Systems, May 2004, 16 pages.	
	38	Radio Shack, "Auto-Sensing 4-Way Audio/Video Selector Switch," 2004, 1 page.	
	39	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 1, 100 pages.	
	40	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 2, 100 pages.	
	41	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 3, 100 pages.	
	42	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 4, 100 pages.	
	43	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 5, 46 pages.	
	44	RANGAN et al., "Feedback Techniques for Continuity and Synchronization in Multimedia Information Retrieval," ACM Transactions on Information Systems, 1995, pp. 145-176, Vol. 13, No. 2.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Real Time Control Protocol (RTCP) and Realtime Transfer Protocol (RTP), RFC 1889 (Jan. 1996) (D+M_0397810-84) (75 pages).	
	46	Realtime Streaming Protocol (RTSP), RFC 2326 (Apr. 1998) (D+M_0397945-8036) (92 pages).	
	47	Realtime Transport Protocol (RTP), RFC 3550 (July 2003) (D+M_0398235-323) (89 pages).	
	48	REID, Mark, "Multimedia conferencing over ISDN and IP networks using ITU-T H-series recommendations: architecture, control and coordination," Computer Networks, 1999, pp. 225-235, Vol. 31.	
	49	RenderingControl:1 Service Template Version 1.01 For UPnP, Version 1.0, (June 25, 2002) (SONDM000115187-249) (63 pages).	
	50	Renewed Request for Ex Parte Re-Examination, U.S. Application No. 90/013959 filed 16 June 2017, 126 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/ 10/11/2019	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.

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	1	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 4: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,312 filed September 27, 2016, 229 pages.	
	2	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 5: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,637 filed September 27, 2016, 213 pages.	
	3	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 6: Defendants' Invalidity Contentions for U.S. Patent No. 9,042,556 filed September 27, 2016, 162 pages.	
	4	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 7: Defendants' Invalidity Contentions for U.S. Patent No. 9,195,258 filed September 27, 2016, 418 pages.	
	5	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 8: Defendants' Invalidity Contentions for U.S. Patent No. 9,202,509 filed September 27, 2016, 331 pages.	
	6	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 9: Defendants' Invalidity Contentions for U.S. Patent No. 9,213,357 filed September 27, 2016, 251 pages.	
	7	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 1: Defendants' Invalidity Contentions for U.S. Patent No. 7,571,014 filed April 15, 2016, 161 pages.	
	8	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 10: Defendants' Invalidity Contentions for U.S. Patent No. 9,213,357 filed April 15, 2016, 244 pages.	
	9	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 11: Defendants' Invalidity Contentions for U.S. Patent No. 9,219,959 filed April 15, 2016, 172 pages.	
	10	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 12: Defendants' Invalidity Contentions for U.S. Design Patent No. D559,197 filed April 15, 2016, 36 pages.	
	11	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 2: Defendants' Invalidity Contentions for U.S. Patent No. 8,588,949 filed April 15, 2016, 112 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 3: Defendants' Invalidity Contentions for U.S. Patent No. 8,843,224 filed April 15, 2016, 118 pages.	
	13	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 4: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,312 filed April 15, 2016, 217 pages.	
	14	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 5: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,637 filed April 15, 2016, 177 pages.	
	15	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 6: Defendants' Invalidity Contentions for U.S. Patent No. 9,042,556 filed April 15, 2016, 86 pages.	
	16	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 7: Defendants' Invalidity Contentions for U.S. Patent No. 9,130,771 filed April 15, 2016, 203 pages.	
	17	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 8: Defendants' Invalidity Contentions for U.S. Patent No. 9,195,258 filed April 15, 2016, 400 pages.	
	18	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 9: Defendants' Invalidity Contentions for U.S. Patent No. 9,202,509 filed April 15, 2016, 163 pages.	
	19	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Preliminary Identification of Prior Art References, provided July 29, 2016, 5 pages.	
	20	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Brief in Support of their Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided October 12, 2016, 24 pages.	
	21	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Opposition to Sonos's Motion to Strike Defendants' New Amended Answer Submitted with their Reply, provided October 3, 2016, 15 pages.	
	22	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided October 12, 2016, 43 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	23	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit B: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided October 12, 2016, 43 pages.	
	24	Sonos, Inc. v. D&M Holdings Inc. et al., Opening Brief in Support of Defendants' Motion for Leave to Amend Their Answer to Add the Defense of Inequitable Conduct, provided August 1, 2016, 11 pages.	
	25	Sonos, Inc. v. D&M Holdings Inc. et al., Order, provided October 7, 2016, 2 pages.	
	26	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff's Opposition to Defendants' Motion for Leave to Amend Their Answer to Add the Defense of Inequitable Conduct, provided August 26, 2016, 25 pages.	
	27	Sonos, Inc. v. D&M Holdings Inc. et al., Redlined Exhibit B: Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, provided August 1, 2016, 27 pages.	
	28	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 206-1, Transcript of 101 Hearing (Nov. 28, 2016) (28 pages).	
	29	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 207, PUBLIC Joint Claim Construction Brief (Nov. 30, 2016) (88 pages).	
	30	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 214, D&M Post-Markman Letter (Dec. 22, 2016) (13 pages).	
	31	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 215, Sonos Post-Markman Letter (Dec. 22, 2016) (15 pages).	
	32	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 219, Claim Construction Opinion (Jan. 12, 2017) (24 pages).	
	33	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 221, Claim Construction Order (Jan. 18 2017) (2 pages).	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), Markman Hearing Transcript (Dec. 14, 2016) (69 pages).	
	35	Sony: AIR-SA 50R Wireless Speaker, Copyright 2009, 2 pages.	
	36	Sony: Altus Quick Setup Guide ALT-SA32PC, Copyright 2009, 2 pages.	
	37	Sony: BD/DVD Home Theatre System Operating Instructions for BDV-E300, E301 and E801, Copyright 2009, 115 pages.	
	38	Sony: BD/DVD Home Theatre System Operating Instructions for BDV-IT1000/BDV-IS1000, Copyright 2008, 159 pages.	
	39	Sony: Blu-ray Disc/DVD Home Theatre System Operating Instructions for BDV-IZ1000W, Copyright 2010, 88 pages.	
	40	Sony: DVD Home Theatre System Operating Instructions for DAV-DZ380W/DZ680W/DZ880W, Copyright 2009, 136 pages.	
	41	Sony: DVD Home Theatre System Operating Instructions for DAV-DZ870W, Copyright 2008, 128 pages.	
	42	Sony Ericsson MS500 User Guide, Copyright 2009, 2 pages.	
	43	Sony: Home Theatre System Operating Instructions for HT-IS100, Copyright 2008, 168 pages.	
	44	Sony: HT-IS100, 5.1 Channel Audio System, last updated November 2009, 2 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Sony: Multi Channel AV Receiver Operating Instructions, 2007, 80 pages.	
	46	Sony: Multi Channel AV Receiver Operating Instructions for STR-DN1000, Copyright 2009, 136 pages.	
	47	Sony: STR-DN1000, Audio Video Receiver, last updated August 2009, 2 pages.	
	48	Sony: Wireless Surround Kit Operating Instructions for WHAT-SA2, Copyright 2010, 56 pages.	
	49	TAYLOR, Marilou, "Long Island Sound," Audio Video Interiors, April 2000, 8 pages.	
	50	TOA Corporation, Digital Processor DP-0206 DACsys2000 Version 2.00 Software Instruction Manual, Copyright 2001, 67 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/ 10/11/2019	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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	1	"884+ Automatic Matrix Mixer Control System," Ivie Technologies, Inc., 2000, pp. 1-4.	
	2	Advanced Driver Tab User Interface WaveLan GUI Guide, AVAGO0009, Agere Systems, February 2004, 4 pages.	
	3	Advisory Action mailed on 01 August 2014, issued in connection with U.S. Patent Application No. 13/186249, filed on 19 July 2011, 2 pages.	
	4	Agere Systems' Voice-over-Wireless LAN (VoWLAN) Station Quality of Service, AVAGO0015, Agere Systems, January 2005, 5 pages.	
	5	AKYILDIZ et al., "Multimedia Group Synchronization Protocols for Integrated Services Networks," IEEE Journal on Selected Areas in Communications, 1996 pp. 162-173, Vol. 14, No. 1.	
	6	Audio Authority: How to Install and Use the Model 1154 Signal Sensing Auto Selector, 2002, 4 pages.	
	7	Audio Authority: Model 1154B High Definition AV Auto Selector, 2008, 8 pages.	
	8	AudioSource: AMP 100 User Manual, 2003, 4 pages.	
	9	AudioTron Quick Start Guide, Version 1.0, March 2001, 24 pages.	
	10	AudioTron Reference Manual, Version 3.0, May 2002, 70 pages.	
	11	AudioTron Setup Guide, Version 3.0, May 2002, 38 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	12	Automatic Profile Hunting Functional Description, AVAGO0013, Agere Systems, February 2004, 2 pages.	
	13	"A/V Surround Receiver AVR-5800," Denon Electronics, 2000, 2 pages.	
	14	"A/V System Controleer, Owner's Manual," B&K Compontents, Ltd., 1998, 52 pages.	
	15	AVTransport:1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (66 pages).	
	16	AXIS Communication: AXIS P8221 Network I/O Audio Module, 2009, 41 pages.	
	17	BALFANZ et al., "Network-in-a-Box: How to Set Up a Secure Wireless Network in Under a Minute," 13th USENIX Security Symposium - Technical Paper, 2002, 23 pages.	
	18	BALFANZ et al., "Talking To Strangers: Authentication in Ad-Hoc Wireless Networks," Xerox Palo Alto Research Center, 2002, 13 pages.	
	19	BARHAM et al., "Wide Area Audio Synchronisation," University of Cambridge Computer Laboratory, 1995, 5 pages.	
	20	Bluetooth. "Specification of the Bluetooth System: The ad hoc SCATTERNET for affordable and highly functional wireless connectivity," Core, Version 1.0 A, 26 July 1999, 1068 pages.	
	21	Bluetooth. "Specification of the Bluetooth System: Wireless connections made easy," Core, Version 1.0 B, 1 December 1999, 1076 pages.	
	22	Bogen Communications, Inc., ProMatrix Digitally Matrixed Amplifier Model PM3180, Copyright1996, 2 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	23	BRASSIL et al., "Enhancing Internet Streaming Media with Cueing Protocols," 2000, 9 pages.	
	24	BREEBAART et al., "Multi-Channel Goes Mobile: MPEG Surround Binaural Rendering," AES 29th International Conference, September 2-4, 2006, pp. 1-13.	
	25	CEN et al., "A Distributed Real-Time MPEG Video Audio Player," Department of Computer Science and Engineering, Oregon Graduate Institute of Science and Technology, 1995, 12 pages.	
	26	Change Notification: Agere Systems WaveLan Multimode Reference Design (D2 to D3), AVAGO0042, Agere Systems, November 2004, 2 pages.	
	27	CHINESE PATENT OFFICE, Chinese Office Action mailed on 03 May 2016, issued in connection with Chinese Application No. 201280045592.8, 18 pages.	
	28	CHINESE PATENT OFFICE, Second Office Action mailed on 31 March 2016, issued in connection with Chinese Application No. 201280029979.4, 6 pages.	
	29	CHINESE PATENT OFFICE,First Office Action mailed on 05 August 2015, issued in connection with Chinese Application No. 201280029979.4, 12 pages.	
	30	Connection Manager: 1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (25 pages).	
	31	ContentDirectory:1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (89 pages).	
	32	Corrected Notice of Allowability mailed on 24 November 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 2 pages.	
	33	DANNENBERG et al., "A. System Supporting Flexible Distributed Real-Time Music Processing," Proceedings of the 2001 International Computer Music Conference, 2001, 4 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	34	DANNENBERG, Roger B., "Remote Access to Interactive Media," Proceedings of the SPIE 1785, 1993, pp. 230-237.	
	35	DAY, Rebecca, "Going Elan!" Primedia Inc., 2003, 4 pages.	
	36	Deep-Sleep Implementation in WL60011 for IEEE 802.11b Applications, AVAGO0020, Agere Systems, July 2004, 22 pages.	
	37	Dell, Inc. "Dell Digital Audio Receiver: Reference Guide," June 2000, 70 pages.	
	38	Dell, Inc. "Start Here," June 2000, 2 pages.	
	39	"Denon 2003-2004 Product Catalog," Denon, 2003-2004, 44 pages.	
	40	Denon AV Surround Receiver AVR-1604/684 User's Manual, 2004, 128 pages.	
	41	Denon AV Surround Receiver AVR-5800 Operating Instructions, Copyright 2000, 67 pages.	
	42	Designing a UPnP AV MediaServer, Nelson Kidd (2003) (SONDM000115062-116) (55 pages).	
	43	"DP-0206 Digital Signal Processor," TOA Electronics, Inc., 2001, pp. 1-12.	
	44	EUROPEAN PATENT OFFICE, European Examination Report mailed on 14 December 2015, issued in connection with European Application No. 12814263.5, 6 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	45	EUROPEAN PATENT OFFICE, European Extended Examination Report mailed on 05 January 2016, issued in connection with European Application No. 15002531.0, 8 pages.	
	46	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 17 October 2018, issued in connection with European Application No. 18187618.6, 6 pages.	
	47	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 18 August 2017, issued in connection with EP Application No. 17000923.7, 5 pages.	
	48	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 5 February 2019, issued in connection with European Application No. 18209665.1, 5 pages.	
	49	EUROPEAN PATENT OFFICE, European Office Action mailed on 09 November 2016, issued in connection with European Application No. 15002531.0 - 1568, 4 pages.	
	50	EUROPEAN PATENT OFFICE, European Office Action mailed on 21 August 2017, issued in connection with European Application No. 17175867.5, 5 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/ 10/11/2019	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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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
S14	2	"20080077261"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/01 09:22
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" | "20040131192" | "20030167335" | "20060149402" | "20050289224" | "20070142022" | "7668990" | "20040015252" | "20030177889" | "20050002535" | "20020003548" | "7218708" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/02 09:49

		"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" | "7130608" | "20040225389" | "20080152165" | "7571014" | "7643894" | "20020072816" | "5946343" | "20050144284" | "20070189544").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 09:58
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	US-PGPUB;	OR	ON	2014/05/03 09:58

		content) and (sync synchron$8) AND GROUP$5 and S24	USPAT; EPO; JPO; DERWENT			
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; JPO; DERWENT	OR	ON	2014/05/03 10:06
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; DERWENT	OR	ON	2014/05/03 10:19
S39	3	"20100299639"	US-PGPUB;	OR	ON	2014/05/03 10:21

			USPAT; EPO; JPO; DERWENT			
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
S42	5	("6163510" "6310839" "6377519" "6414914").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:23
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; DERWENT	OR	ON	2014/05/03 10:42
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	3523	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;	OR	ON	2014/05/03 10:43

			USPAT; EPO; JPO; DERWENT			
S52	6	S50 S51	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 10:43
S53	4467	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; DERWENT	OR	ON	2014/05/03 11:22
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;	OR	ON	2014/05/03 11:47

			USPAT; EPO; JPO; DERWENT			
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; DERWENT	OR	ON	2014/05/03 11:55
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; DERWENT	OR	ON	2014/05/03 12:00
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; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/03 12:18
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;	OR	ON	2014/05/16 12:08

			DERWENT			
S87	243	704/500-502.ccls. and 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:08
S88	132883	((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; EPO; JPO; DERWENT	OR	ON	2014/05/16 12:09

		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.)				
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	4491	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT;	OR	ON	2014/05/16 14:33

			EPO; JPO; DERWENT			
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; JPO; DERWENT	OR	ON	2014/07/15 13:19
S189	8	("8275307" "20020098878" "8639370" "7966085").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:22
S190	3865	(g06f3/162 g06f3/165 h04b1/20 h04b1/202 h04b1/205 h04b1/207 h04h20/106 h04r2420/01 h04r2420/03 h04r2420/05	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2014/07/15 13:25

		h04r5/04)"cpc."	DERWENT			
S191	4353	(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	1423988	detect$6 near3 signal	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2014/07/15 13:26
S193	33531	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; DERWENT	OR	ON	2014/07/15 13:26
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	156663	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-	OR	ON	2014/07/22

			PGPUB; USPAT; EPO; JPO; DERWENT			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; JPO; DERWENT	OR	ON	2014/07/22 12:07
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; DERWENT	OR	ON	2014/07/22 12:09

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; DERWENT	OR	ON	2015/02/06 13:10
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" | "7130616" | "7143939" | "7236773" | "7657910" | "8014423" | "8843228").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:06
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; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:07
S346	3	S335 and config$9	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/06 17:07
S347	12	("20020133764" | "20040160928" |	US-	OR	ON	2015/02/06

		"20050141469" | "20050169193" | "20050288805" | "20060173978" | "20060174116" | "20070192833" | "6466832" | "6954641").PN. OR ("7983615").URPN.	PGPUB; USPAT; USOCR			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-	OR	ON	2015/02/06

		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.	PGPUB; USPAT; EPO			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;	OR	ON	2015/02/06 17:55

			USPAT; EPO; JPO; DERWENT			
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	3355	(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;	OR	ON	2015/02/07 10:06

			USPAT; EPO; JPO; DERWENT			
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)	US-PGPUB;	OR	ON	2015/02/07 10:18

		and reverb$8	USPAT; EPO; JPO; DERWENT			
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/07 10:52

		"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.				
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	129137	((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; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24

		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	3877	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24
S408	5124	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:24
S409	39	g06f17/30772.cpc. and (S407 and S408)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2015/02/21 16:24

			DERWENT			
S410	34847	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	129137	((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; EPO; JPO; DERWENT	OR	ON	2015/02/21 16:58

		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; JPO; DERWENT	OR	ON	2015/02/21 16:59
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;	OR	ON	2015/02/23 08:40

			DERWENT			
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; DERWENT	OR	ON	2015/02/23 09:14
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" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020124097" | "20030198257" | "20040015252" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 10:06

		"20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517").PN.				
S425	4500803	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	1999	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	1228	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	4366	381/17,77,80,81.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:04
S445	6163	((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	2475	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; EPO; JPO; DERWENT	OR	ON	2015/02/23 11:33

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	1492	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; JPO; DERWENT	OR	ON	2015/02/23 11:37
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-	US-PGPUB; USPAT	OR	ON	2015/02/23 15:04

		7804972-$ or US-8588432-$ or US-8498726-$ or US-6487296-$).did.				
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" | "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.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2015/02/23 15:09
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;	OR	ON	2015/02/23 15:09

			DERWENT			
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; JPO; DERWENT	OR	ON	2015/02/23 15:10
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; DERWENT	OR	ON	2015/02/23 15:32
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-	US-PGPUB; USPAT	OR	ON	2015/02/23 16:54

		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.				
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; JPO; DERWENT	OR	ON	2015/02/23 17:30
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" |	US-PGPUB; USPAT;	OR	ON	2015/02/24 15:48

		"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" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020124097" | "20030198257" | "20040015252" | "20040131192" | "20050002535" | "6587127" | "7539551" | "7643894" | "8239559" | "8290603" | "20080066120" | "7302468" | "7817960" | "6757517").PN.	EPO; JPO; 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	6683	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	11175	((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	2582	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;	OR	ON	2016/01/13 11:58

			EPO; 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; DERWENT	OR	ON	2016/02/04 13:18
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:19

		"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.				
S710	3	"2014074089"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/04 13:26
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; DERWENT	OR	ON	2016/02/05 11:23
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;	OR	ON	2016/02/05 14:03

			DERWENT			
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" | "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"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/02/07 13:53

		| "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" | "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; DERWENT	OR	ON	2016/03/07 13:56

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; JPO; DERWENT	OR	ON	2016/03/07 14:49
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/07 15:11

		"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.				
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 08:56

		"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.				
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	3536	((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	1057	((H03G5/005 OR H03G5/025 OR H03G5/165).CPC.)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/08 11:32
S761	1057	((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-	OR	ON	2016/03/08

			PGPUB; USPAT; EPO; JPO; DERWENT			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" |	US-PGPUB; USPAT; USOCR	OR	ON	2016/03/08 12:38

		"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" | "8588432" | "8700730" | "8788080").PN. OR ("9219959").URPN.				
S771	3536	((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	1057	((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	4584	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;	OR	ON	2016/03/08 13:07

			USPAT; EPO; JPO; DERWENT			
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" | "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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/03/10 10:40

		"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-	US-PGPUB; USPAT; DERWENT	OR	ON	2016/03/10 10:41

		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.				
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-$ or US-	US-PGPUB; USPAT; EPO	OR	ON	2016/03/10 13:49

		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	1112	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	85654	((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	4370	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	6192	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2016/05/27 13:16

			DERWENT			
S803	1249	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;	OR	ON	2016/05/27 13:19

			DERWENT			
S815	37729	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26
S816	1152	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	155343	((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; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26

		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; USPAT; EPO; JPO; DERWENT	OR	ON	2016/05/27 13:26
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;	OR	ON	2016/06/22 13:43

			DERWENT			
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; EPO; JPO; DERWENT	OR	ON	2016/06/23 07:49
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; JPO; DERWENT	OR	ON	2016/06/23 11:22
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;	OR	ON	2016/06/23 11:25

			DERWENT			
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; DERWENT	OR	ON	2016/06/23 11:38
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:04

		"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.				
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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:04

		"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 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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 12:06

		"6404811" | "7657910" | "8014423" | "7483538" | "20050177256" | "6487296" | "7346332" | "8423893" | "20070142944" | "20070189544" | "6604023" | "20020026442" | "20130253679" | "20020143547" | "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" | "20140328500" | "20080243609" | "20100146085" | "20140189139" | "8655307" | "20110113337" | "20130345840" | "4306113" | "8429243" | "8533166" | "20060210097" | "20130238996" | "20140074621" | "20050043831" | "8146126" | "20070089127" | "20140371889" | "20060291666" | "8533166").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/23 17:35
S878	6	("20140068434" | "8046797" |	US-	OR	ON	2016/06/23

		"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.	PGPUB; USPAT; EPO; JPO; DERWENT			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; DERWENT	OR	ON	2016/06/24 14:44
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;	OR	ON	2016/06/24 14:45

			DERWENT			
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	10807	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; DERWENT	OR	ON	2016/06/24 14:46
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" | "20140294200" | "20150220302" | "4696037" | "7519188" | "8331585" | "8879761" | "8914559" | "7130608" | "7130616" | "20090180632" | "20130259254" | "6809635" | "20020026442" | "20030157951" | "5923902" | "20060050896" | "6771784" | "7853341" | "8103009" | "20050201549" | "20070003067" | "20110170710" | "20120051567" |	USPAT	OR	ON	2016/06/24 15:22

		"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" | "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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/24 15:22

		"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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/06/25 10:08

		"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.				
S952	12	"552049".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/08 10:50
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; DERWENT	OR	ON	2016/09/08 13:10

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; DERWENT	OR	ON	2016/09/08 13:32
S967	5135	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
S984	87	("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" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/09 13:20

		"20030161479" | "20050147261" | "7571014" | "7643894" | "20100299639").PN.				
S985	2	("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. and baudino	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/09 13:20
S986	5	("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. and (shdema korhonen baudino)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/09/09 13:20
S987	256	("20010050991" | "20020078161" | "20020137505" | "20020196951" | "20030002689" | "20030031333" | "20030161479" | "20030185400" | "20040014426" | "20040037433" | "20040042629" | "20040171346" | "20040249490" | "20050031135" | "20050069153" | "20050147261" | "20060193482" | "20060294569" | "20070003067" | "20070071255" | "20070087686" | "20080065232" | "20080075295" | "20080144864" | "20080247554" | "20090070434" | "20090180632" | "20100067716" | "20100142735" | "20100290643" | "20110044476" | "20110110533" | "20110170710" | "20110299696" | "20120051558" | "20120127831" | "20120148075" | "20120263325" | "20130010970" | "20130028443" | "20130051572" | "20130129122" | "20130259254" | "20130305152" | "20140016784" | "20140016786" |	US-PGPUB; USPAT	OR	OFF	2016/10/27 10:06

		"20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "20150365987" | "4845751" | "4995778" | "5272757" | "5361381" | "5553147" | "5668884" | "5673323" | "5910991" | "6195435" | "6212282" | "6704421" | "6859538" | "6916980" | "6931134" | "6987947" | "7072477" | "7096169" | "7171010" | "7428310" | "7490044" | "7492912" | "7519188" | "7548851" | "7630500" | "7653344" | "7792311" | "7987294" | "8050203" | "8063698" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8442239" | "8452020" | "8577045" | "8600075" | "8620006" | "8843224" | "8855319" | "8879761" | "8914559" | "8923997" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556" | "9226073" | "9325286" | "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" | "3956591" | "4105974" | "4306114" | "4509211" | "4530091" | "4701629" | "4731814" | "4824059" | "4994908" | "5086385" | "5151922" | "5182552" | "5237327" | "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").PN.				
S988	225	("6018376" | "6029196" | "6038614" | "6046550" | "6061457" | "6081266" | "6088063" | "6101195" | "6127941" | "6148205" | "6169725" | "6181383" | "6246701" | "6269406" | "6301012" | "6310652" | "6313879" | "6321252" | "6353172" | "6356871" | "6418150" | "6442443" | "6449642" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6535121" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6741961" | "6778073" | "6816510" | "6826283" | "6859460" | "6873862" | "6901439" | "6915347" | "6919771" | "6931557" | "6937988" | "6987767" | "7046677" | "7092528" | "7092694" | "7120168" | "7130316" | "7136934" | "7139981" | "7146260" | "7161939" | "7197148" | "7206618" | "7260616" | "7263110" | "7277547" | "7289631" | "7295548" | "7305694" | "7308188" | "7324857" | "7356011" | "7366206" | "7430181" | "7457948" | "7472058" | "7505889" | "7548744" | "7558224" | "7558635" | "7627825" | "7630501" | "7675943" | "7676044" | "7676142" | "7688306" | "7721032" |	US-PGPUB; USPAT	OR	OFF	2016/10/27 10:06

		"7746906" | "7761176" | "7831054" | "7853341" | "7882234" | "7933418" | "7945636" | "7945708" | "7966388" | "7995732" | "8041062" | "8150079" | "8170222" | "8233029" | "8311226" | "8374595" | "8411883" | "8477958" | "8565455" | "8600084" | "8654995" | "8861739" | "8942395" | "20010043456" | "20020072816" | "20020072817" | "20020078293" | "20020101357" | "20020124097" | "20020131761" | "20020165921" | "20030014486" | "20030043856" | "20030063755" | "20030103088" | "20030167335" | "20030179780" | "20030198257" | "20030212802" | "20030219007" | "20030231208" | "20040001591" | "20040019807" | "20040059842" | "20040117462" | "20040168081" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040253969" | "20050060435" | "20050131558" | "20050154766" | "20050160270" | "20050197725" | "20060072489" | "20060173844" | "20060222186" | "20060227985" | "20060259649" | "20060270395" | "20080205070" | "20080303947" | "20090011798" | "20090124289" | "20100087089" | "20110001632" | "20110316768" | "20090060219" | "20090169030" | "4382158" | "5761320" | "7136934" | "9219959" | "20080242222" | "None" | "9245514" | "8762565" | "8965544" | "None" | "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").PN.				
S989	53	("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" | "7962482" | "8014423" | "8045952" | "8054987" | "8086287" | "8103009" | "8135141" | "8189824" | "8233635" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8498726" | "8588432" | "8700730" | "8788080" | "8843228" | "8886347").PN.	US-PGPUB; USPAT	OR	OFF	2016/10/27 10:06
S990	11	"806070".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/27 10:43
S991	527	S987 S988 S989	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/27 10:48
S992	3	S991 and bryce.in.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/27 10:48
S993	256	("20010050991" | "20020078161" | "20020137505" | "20020196951" | "20030002689" | "20030031333" | "20030161479" | "20030185400" | "20040014426" | "20040037433" | "20040042629" | "20040171346" | "20040249490" | "20050031135" | "20050069153" | "20050147261" | "20060193482" | "20060294569" | "20070003067" | "20070071255" | "20070087686" | "20080065232" | "20080075295" | "20080144864" | "20080247554" | "20090070434" | "20090180632" | "20100067716" | "20100142735" | "20100290643" | "20110044476" | "20110110533" |	US-PGPUB; USPAT	OR	OFF	2016/10/29 10:35

		"20110170710" | "20110299696" | "20120051558" | "20120127831" | "20120148075" | "20120263325" | "20130010970" | "20130028443" | "20130051572" | "20130129122" | "20130259254" | "20130305152" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "20150365987" | "4845751" | "4995778" | "5272757" | "5361381" | "5553147" | "5668884" | "5673323" | "5910991" | "6195435" | "6212282" | "6704421" | "6859538" | "6916980" | "6931134" | "6987947" | "7072477" | "7096169" | "7171010" | "7428310" | "7490044" | "7492912" | "7519188" | "7548851" | "7630500" | "7653344" | "7792311" | "7987294" | "8050203" | "8063698" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8442239" | "8452020" | "8577045" | "8600075" | "8620006" | "8843224" | "8855319" | "8879761" | "8914559" | "8923997" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556" | "9226073" | "9325286" | "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" | "3956591" | "4105974" | "4306114" | "4509211" | "4530091" | "4701629" | "4731814" | "4824059" | "4994908" | "5086385" | "5151922" | "5182552" | "5237327" | "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").PN.				
S994	225	("6018376" | "6029196" | "6038614" | "6046550" | "6061457" | "6081266" | "6088063" | "6101195" | "6127941" | "6148205" | "6169725" | "6181383" | "6246701" | "6269406" | "6301012" | "6310652" | "6313879" | "6321252" | "6353172" | "6356871" | "6418150" | "6442443" | "6449642" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6535121" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6741961" | "6778073" | "6816510" | "6826283" | "6859460" | "6873862" | "6901439" | "6915347" | "6919771" | "6931557" | "6937988" | "6987767" | "7046677" | "7092528" | "7092694" | "7120168" | "7130316" | "7136934" | "7139981" | "7146260" | "7161939" | "7197148" | "7206618" | "7260616" | "7263110" | "7277547" | "7289631" | "7295548" | "7305694" | "7308188"	US-PGPUB; USPAT	OR	OFF	2016/10/29 10:35

		"7324857" | "7356011" | "7366206" | "7430181" | "7457948" | "7472058" | "7505889" | "7548744" | "7558224" | "7558635" | "7627825" | "7630501" | "7675943" | "7676044" | "7676142" | "7688306" | "7721032" | "7746906" | "7761176" | "7831054" | "7853341" | "7882234" | "7933418" | "7945636" | "7945708" | "7966388" | "7995732" | "8041062" | "8150079" | "8170222" | "8233029" | "8311226" | "8374595" | "8411883" | "8477958" | "8565455" | "8600084" | "8654995" | "8861739" | "8942395" | "20010043456" | "20020072816" | "20020072817" | "20020078293" | "20020101357" | "20020124097" | "20020131761" | "20020165921" | "20030014486" | "20030043856" | "20030063755" | "20030103088" | "20030167335" | "20030179780" | "20030198257" | "20030212802" | "20030219007" | "20030231208" | "20040001591" | "20040019807" | "20040059842" | "20040117462" | "20040168081" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040253969" | "20050060435" | "20050131558" | "20050154766" | "20050160270" | "20050197725" | "20060072489" | "20060173844" | "20060222186" | "20060227985" | "20060259649" | "20060270395" | "20080205070" | "20080303947" | "20090011798" | "20090124289" | "20100087089" | "20110001632" | "20110316768" | "20090060219" | "20090169030" | "4382158" | "5761320" | "7136934" | "9219959" | "20080242222" | "None" | "9245514" | "8762565" | "8965544" | "None" | "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").PN.				
S995	53	("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" | "7962482" | "8014423" | "8045952" | "8054987" | "8086287" | "8103009" | "8135141" | "8189824" | "8233635" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8498726" | "8588432" | "8700730" | "8788080" | "8843228" | "8886347").PN.	US-PGPUB; USPAT	OR	OFF	2016/10/29 10:35
S996	527	S993 S994 S995	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:35
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

			DERWENT			
S1001	1	"20060253210" and zero and cross$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:49
S1002	1	("1705588" "2014109982") and zero and cross$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:50
S1003	11	("1705588" "2014109982")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:50
S1004	4	("20150366509" "7790976" "7737353") and zero and cross$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2016/10/29 10:51
S1005	262	("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" | "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"	US-PGPUB; USPAT	OR	ON	2017/01/03 10:13

		"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" | "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" | "D430143" | "D431552").PN.				
S1006	229	("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" | "20010050991" | "20020078161" | "20020137505" | "20030002689" | "20030161479" | "20030185400" | "20040014426" | "20040037433" | "20040042629" | "20040171346" | "20040249490" | "20050147261" | "20060193482" | "20070003067" | "20070071255" | "20070087686" | "20080065232" | "20080075295" | "20080144864" | "20090070434" | "20100067716" | "20100142735" | "20100290643" | "20110044476" | "20110110533" | "20110170710" | "20110299696" | "20120051558" | "20120127831" | "20120148075" | "20120263325" | "20130010970" | "20130028443" | "20130051572" | "20130129122" | "20130259254" | "20130305152" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "20150365987" | "4845751" | "4995778" | "5272757"	US-PGPUB; USPAT	OR	ON	2017/01/03 10:13

		| "5361381" | "5553147" | "5668884" | "5673323" | "5910991" | "6195435" | "6212282" | "6704421" | "6859538" | "6916980" | "6931134" | "6987947" | "7072477" | "7096169" | "7171010" | "7428310" | "7490044" | "7492912" | "7519188" | "7548851" | "7630500" | "7653344" | "7792311" | "7987294" | "8050203" | "8063698" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8442239" | "8452020" | "8577045" | "8600075" | "8620006" | "8843224" | "8855319" | "8879761" | "8914559" | "8923997" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556" | "9226073" | "9325286" | "20020196951" | "20030031333" | "20050031135" | "20050069153" | "20060294569" | "20080247554" | "20090060219" | "20090169030" | "20090180632" | "4382158" | "5761320" | "7136934" | "9219959" | "20080242222" | "9245514" | "8762565" | "8965544" | "20080159545" | "20090232326" | "20100153097" | "6487296" | "7689305" | "7804972" | "8054987" | "8233635" | "8498726" | "8588432" | "8843228" | "8886347" | "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").PN.				
S1007	75	("20070142022" | "20070142944" | "20070189544" | "20070223725" | "20070288610" | "20080025535" | "20080045140" | "20080066094" | "20080066120" | "20080077261" | "20080092204" | "20080144861" | "20080152165" | "20080162668" | "20090097672" | "20090228919" | "20100010651" | "20100052843" |	US-PGPUB; USPAT	OR	ON	2017/01/03 10:13

		"20100284389" | "20100299639" | "20120047435" | "20130253679" | "20130293345" | "5182552" | "5406634" | "5519641" | "5923902" | "5946343" | "6256554" | "6404811" | "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" | "7742832" | "7761176" | "7805210" | "7817960" | "7849181" | "7853341" | "7962482" | "8014423" | "8045952" | "8086287" | "8103009" | "8135141" | "8189824" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8700730" | "8788080").PN.				
S1008	528	S1005 S1006 S1007	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/01/03 10:19
S1009	16	S1008 and shdema	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/01/03 10:19
S1010	134	("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"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/01/03 10:41

		"20050131558" "20030014484" "7627825" "6469633" "5761320" "6469633" "6826283" "5182552" "20020072816" "20030103088" "7197148" "5182552" "6469633" "20020072816" "6931557").pn.				
S1026	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" | "6418150" |	US-PGPUB; USPAT	OR	ON	2017/02/17 12:00

		"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.				
S1027	237	("D384940" | "D387352" | "D388792" | "D389143" | "D392641" | "D393628" | "D394659" | "D395889" | "D397996" | "D401587" | "D404741" | "D405071" | "D406847" | "D407071" | "D410927" | "D412337" | "D415496" | "D416021" | "D420006" | "D429246" |	US-PGPUB; USPAT	OR	ON	2017/02/17 12:00

		"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" |				
		"20010050991" | "20020078161" | "20020137505" | "20030002689" | "20030161479" | "20030185400" | "20040014426" | "20040037433" | "20040042629" | "20040171346" | "20040249490" | "20050147261" | "20060193482" | "20070003067" | "20070071255" | "20070087686" | "20080065232" | "20080075295" | "20080144864" | "20090070434" | "20100067716" | "20100142735" | "20100290643" | "20110044476" | "20110110533" | "20110170710" | "20110299696" | "20120051558" | "20120127831" | "20120148075" | "20120263325" | "20130010970" | "20130028443" | "20130051572" | "20130129122" | "20130259254" | "20130305152" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140112481" | "20140219456" | "20140226823" | "20140294200" | "20140355768" | "20140355794" | "20150063610" | "20150146886" | "20150201274" | "20150281866" | "20150365987" |				
		"4845751" | "4995778" | "5272757" | "5361381" | "5553147" | "5668884" | "5673323" | "5910991" | "6195435" | "6212282" | "6704421" | "6859538" | "6916980" | "6931134" | "6987947" | "7072477" | "7096169" | "7171010" | "7428310" | "7490044" | "7492912" | "7519188" | "7548851" | "7630500" | "7653344" | "7792311" | "7987294" | "8050203" | "8063698" | "8139774" | "8160281" | "8175292" | "8229125" | "8233632" | "8238578" | "8243961" | "8265310" | "8290185" | "8306235" | "8325935" | "8331585" | "8391501" | "8442239" | "8452020" | "8577045" |				

		"8600075" | "8620006" | "8843224" | "8855319" | "8879761" | "8914559" | "8923997" | "8934647" | "8934655" | "8965546" | "8977974" | "8984442" | "9020153" | "9042556" | "9226073" | "9325286" | "4382158" | "5761320" | "7136934" | "9219959" | "20020196951" | "20030031333" | "20050031135" | "20050069153" | "20060294569" | "20080247554" | "20090060219" | "20090169030" | "20090180632" | "20080242222" | "245514" | "8762565" | "8965544" | "20130253679" | "6487296" | "7689305" | "7804972" | "8054987" | "8233635" | "8498726" | "8588432" | "20080159545" | "20090232326" | "20100153097" | "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").PN.				
S1028	76	("20070142022" | "20070142944" | "20070189544" | "20070223725" | "20070288610" | "20080025535" | "20080045140" | "20080066094" | "20080066120" | "20080077261" | "20080092204" | "20080144861" | "20080152165" | "20080162668" | "20090097672" | "20090228919" | "20100010651" | "20100052843" | "20100284389" | "20100299639" | "20120047435" | "20130293345" | "5182552" | "5406634" | "5519641" | "5923902" | "5946343" | "6256554" | "6404811" | "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" | "7742832" | "7761176" | "7805210" | "7817960" | "7849181" | "7853341"	US-PGPUB; USPAT	OR	ON	2017/02/17 12:00

		| "7962482" | "8014423" | "8045952" | "8086287" | "8103009" | "8135141" | "8189824" | "8234395" | "8239559" | "8290603" | "8423893" | "8483853" | "8700730" | "8788080" | "8843228" | "8886347").PN.				
S1090	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" | "6535121" | "6636269" | "6653899" | "6654720" | "6654956" | "6684060" | "6704421" |	US-PGPUB; USPAT	OR	ON	2017/02/28 11:59

		"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.				
S1091	143	("D430143" | "D431552" | "D432525" | "D444475" | "D452520" | "D462339" | "D462340" | "D462945" | "D466108" | "D468297" | "D474763" | "D475993" |	US-PGPUB; USPAT	OR	ON	2017/02/28 11:59

		"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" | "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.				
S1158	9	"731119".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/18 14:55
S1159	2	"20160357503"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/18 14:55
S1160	34664	((G06F3/165 OR H04R2227/005 OR H04R27/00 OR H04R2420/01 OR H04R2430/01 OR H04R3/04 OR H04R3/12 OR G11B27/34).CPC.) 700/94.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/03/18 14:56
S1161	39	("5440644" | "5761320" | "5923902" | "6032202" | "6256554" | "6404811" | "6469633" | "6522886" | "6611537" | "6631410" | "6757517" | "6778869" | "7130608" | "7130616" | "7143939" | "7236773" | "7295548" | "7483538" | "7571014" | "7630501" | "7643894" | "7657910" | "7853341" | "7987294" | "8014423" | "8045952" | "8103009" | "8234395" | "8483853" | "20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "8799080" | "8903526" | "20130243199").PN.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:10
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	802147	decompos$6	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/03/18 16:41
S1165	63814	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	US-PGPUB;	OR	ON	2017/03/18 16:43

		((path patch ray) near2 trac$6 beam$form$4) and (intensity) and position	USPAT; EPO; DERWENT			
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; DERWENT	OR	ON	2017/03/20 16:09
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	16075	(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" "20020072816" "20030103088" "7987294" "7197148" "5282552" "6469633").pn.	US-PGPUB; USPAT	OR	ON	2017/03/21 17:54
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	4078	mpeg4 and pair$6	US-PGPUB; USPAT	OR	ON	2017/03/22 12:17
S1297	15863	(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	16138	((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	1129	((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; DERWENT	OR	ON	2017/03/29 17:14
S1344	0	"339249".ap. and fig$6 with 6c	US-PGPUB; USPAT;	OR	ON	2017/03/29 17:14

			EPO; JPO; DERWENT			
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; DERWENT	OR	ON	2017/03/30 13:03
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;	OR	ON	2017/03/31 16:19

			USPAT; EPO; JPO; DERWENT			
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" |	US-PGPUB; USPAT	OR	ON	2017/04/17 17:21

		"20030020763"	"20030023741"				
		"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" | "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.	US-PGPUB; USPAT	OR	ON	2017/04/17 17:21
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	68186	((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" | "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" |	US-PGPUB; USPAT	OR	ON	2017/04/18 11:24

		"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"	US-PGPUB; USPAT	OR	ON	2017/04/18 11:24

		| "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" | "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	4569	((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; DERWENT	OR	ON	2017/04/19 15:01
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;	OR	ON	2017/04/19 15:06

			DERWENT			
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; DERWENT	OR	ON	2017/04/19 15:12
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	OR	ON	2017/04/19 15:15
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;	OR	ON	2017/04/19 15:19

			DERWENT			
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$e dolby adj e)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 12:27
S1445	615	(dolby$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; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:20

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; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:48
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	15055	guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 15:51
S1463	1940	(guard$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	15055	guard same ((sync synchron$9 supplement$6))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2017/04/20 17:15
S1475	1940	(guard$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	13869	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; EPO; DERWENT	OR	ON	2017/04/21 17:13
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;	OR	ON	2017/04/21 21:37

			USPAT; EPO; DERWENT			
S1517	3	"20140135962"	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2017/04/21 21:37
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" |	US-	OR	ON	2018/08/08

		"20150286360").PN.	PGPUB; USPAT			10:15
S1542	3322	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	13108	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	1288	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-	OR	ON	2018/08/08

			PGPUB; USPAT; EPO; JPO; DERWENT			14:01
S1558	4	"228812".ap. and third	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/08 14:01
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; DERWENT	OR	ON	2018/08/08 14:26
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-	OR	ON	2018/08/10

			PGPUB; USPAT; EPO; JPO; DERWENT			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; DERWENT	OR	ON	2018/08/10 11:57
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" | "7483538" | "20050021590" | "20090076881" | "20100017714" |	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/10 13:46

		"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; DERWENT	OR	ON	2018/08/10 14:21
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;	OR	ON	2018/08/11 14:24

			USPAT; EPO; JPO; DERWENT			
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; DERWENT	OR	ON	2018/08/11 14:29
S1642	1	"20080077261" and join$4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:29
S1643	1	"20080077261" and (frequency eq equal$8)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:31
S1644	1	"20080077261" and (leav$4 enter$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:37
S1645	1	"20080077261" and (separate channel)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:40
S1646	0	"20080077261" and (output$4 near5 audio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
S1647	0	"20080077261" and (output$4 same (channel audio stream$4))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
S1648	0	"20080077261" and (output$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/11 14:42
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;	OR	ON	2018/08/11 14:43

			USPAT; EPO; JPO; DERWENT			
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" | "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" |	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

		"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" | "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").PN.				
S1654	200	("20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "20060072489" | "20060095516" | "20060098936" |	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

		"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"				
		"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" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140037097" | "20140064501").PN.				
S1655	263	("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" | "20150304288" | "20150365987" | "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"	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

"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"
"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" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939").PN.				
S1656	280	("7162315" | "7171010" | "7185090" | "7187947" | "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" | "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"	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

		| "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.				
S1657	87	("D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" | "D357024" | "D362446" | "D363933" | "D364877" |	US-PGPUB; USPAT	OR	ON	2018/08/13 11:00

		"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.				
S1658	4	"20080077261" "20020072816"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:40
S1659	1	S1658 and pass	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 11:41
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;	OR	ON	2018/08/13 11:54

			USPAT; EPO; JPO; DERWENT			
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
S1670	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" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" |	US-PGPUB; USPAT	OR	ON	2018/08/13 15:00

		"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"				
		"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").PN.				
S1671	200	("20050160270" | "20050166135" | "20050168630" | "20050177256" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050216556" | "20050254505" | "20050262217" | "20050266798" | "20050266826" | "20050281255" | "20050283820" | "20050288805" | "20050289224" | "20050289244" | "20060041616" | "20060041639" | "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" | "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" |	US-PGPUB; USPAT	OR	ON	2018/08/13 15:00

		"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" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483" | "20140016784" | "20140016786" | "20140016802" | "20140023196" | "20140037097" | "20140064501").PN.				
S1672	263	("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" |	US-PGPUB; USPAT	OR	ON	2018/08/13 15:00

		"20150256954" | "20150281866" | "20150304288" | "20150365987" | "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" |			

		"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" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939").PN.				
S1673	280	("7162315" | "7171010" | "7185090" | "7187947" | "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" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" |	US-PGPUB; USPAT	OR	ON	2018/08/13 15:00

		"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" | "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	2018/08/13 15:00
S1675	1030	S1670 S1671 S1672 S1673 S1674	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:00
S1676	4	"20080077261" "20020072816"	US-PGPUB;	OR	ON	2018/08/13 15:01

			USPAT; EPO; JPO; DERWENT			
S1677	4	S1676	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/13 15:01
S1678	1030	(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	38744	(auto$4sens$4 (automati$6 input$6) near4 sens$6) same (config$8 scene zone group$4) and (synchroniz$8 synchron$4 sync$3)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/14 13:07
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; EPO; JPO; DERWENT	OR	ON	2018/08/16 14:59
S1688	6	sonos.as. and button same (sync synchron$8) and	US-PGPUB;	OR	ON	2018/08/16 14:59

		@pd<="20130723"	USPAT; EPO; JPO; DERWENT			
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	2514	(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	OR	ON	2018/08/16 15:05
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-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:15

		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.				
S1700	6720100	(gps geograph$6 timestamp pts)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:15
S1701	5755753	$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	473241	(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;	OR	ON	2018/08/17 13:22

			USPAT; EPO; JPO; DERWENT			
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	1122522	hrtf head with (locat$6 position$4 orient$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:24
S1711	1142415	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	19373992	(gps geograph$6 timestamp pts position$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:26
S1714	18047499	(gps geograph$6 time$3stamp$4 pts position positioning)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:29
S1715	519	(origo origio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1716	120	S1714 same S1715	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1717	100	(US-20060223518-$ 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-	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30

		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.				
S1718	473241	(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; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 13:30
S1720	1139342	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	1507237	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-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:34

		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.				
S1724	114280	(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	212201	(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	1507237	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$6)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:41
S1729	1120682	(gps timestamp time adj stamp pts coordinate longitude latitude position positioning) and S1728	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:41
S1730	55	(origo origio) and S1729	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:42
S1731	100	(US-20060223518-$ 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-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:43

		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.				
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$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:51
S1734	519	(origo origio)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:51
S1735	468	(origo)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 14:51
S1736	100	(US-20060223518-$ 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-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/17 16:31

		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.				
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; DERWENT	OR	ON	2018/08/21 16:12
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;	OR	ON	2018/08/21 17:05

			USPAT; EPO; JPO; DERWENT			
S1745	2	sonos.as. and sequent$8 with indicat$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:27
S1746	1227	playback near3 device and sequent$8 with indicat$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/21 17:27
S1747	1363	(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; DERWENT	OR	ON	2018/08/22 10:32
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	US-PGPUB;	OR	ON	2018/08/22 10:36

		chapter)	USPAT; EPO; JPO; DERWENT			
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; DERWENT	OR	ON	2018/08/22 12:18
S1761	2	"20170235545"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/08/22 12:19
S1762	34078	((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" |	US-PGPUB; USPAT	OR	ON	2018/08/22 12:45

		"20040081099" | "20040117462" | "20040136554" | "20040168081" | "20040171346" | "20040177167" | "20040183827" | "20040185773" | "20040203590" | "20040223622" | "20040237750" | "20040239816" | "20040249490" | "20040252400" | "20040253969" | "20050060435" | "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" | "8234395" | "8238578" |	US-PGPUB; USPAT	OR	ON	2018/08/22 12:45

		"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	5210	group$5 near3 (level gain fader adjust$4 volume) near4 averag$4	US-PGPUB;	OR	ON	2018/10/12 17:32

			USPAT; EPO; JPO; DERWENT			
S1821	4887	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;	OR	ON	2018/10/13 14:20

			USPAT; EPO; JPO; DERWENT			
S1833	4944	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	4944	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	6431	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	2914	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)	US-PGPUB;	OR	ON	2018/10/13 14:28

		and (rest$4 run$4 sit$4 climb$4 $3cycl$4 yoga)and @pd<="20141230"	USPAT; EPO; JPO; DERWENT			
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-	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/13 14:40

		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.				
S1853	0	"808875.ap.",	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2018/10/19 13:24
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; DERWENT	OR	ON	2018/10/25 15:57
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;	OR	ON	2018/10/25 15:58

			DERWENT			
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; DERWENT	OR	ON	2018/10/26 10:18
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; DERWENT	OR	ON	2018/10/26 11:58
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;	OR	ON	2018/10/26 12:10

			DERWENT			
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; DERWENT	OR	ON	2018/10/26 12:18
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; DERWENT	OR	ON	2018/10/26 12:28
S1896	1	"083499".ap. and scheme	US-PGPUB; USPAT; EPO; JPO;	OR	ON	2018/10/26 12:29

			DERWENT			
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; DERWENT	OR	ON	2018/10/26 12:52
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"	US-PGPUB;	OR	ON	2018/10/26 12:57

		"20040223622" "7689305") and (sync synchron$9) same clock$6 and (stereo surround channel $6channel) and address not sonos.as.	USPAT; EPO; JPO; DERWENT			
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	OR	ON	2018/10/26 12:57
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" |	US-PGPUB; USPAT; USOCR	OR	ON	2018/10/26 13:02

		"8423893" | "8483853" | "8498726" | "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; DERWENT	OR	ON	2018/10/27 13:31
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;	OR	ON	2018/10/27 13:43

			EPO; JPO; DERWENT			
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; DERWENT	OR	ON	2018/12/03 08:51
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;	OR	ON	2018/12/03 11:53

			DERWENT			
S1962	6	("009182" "013740" "861653").ap. and group$5 with (volume setting)	US-PGPUB; USPAT; DERWENT	OR	ON	2018/12/03 12:01
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" | "20030018797" | "20030020763" | "20030023741" | "20030035072" | "20030035444" | "20030041173" | "20030041174" | "20030043856" | "20030043924" | "20030050058" | "20030055892" | "20030061428" | "20030063528" | "20030063755" | "20030066094" | "20030067437" | "20030073432" | "20030097478" | "20030099212" | "20030099221" | "20030101253" | "20030103088" |	US-PGPUB; USPAT	OR	ON	2018/12/03 17:49

		"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" | "20040224638" | "20040228367" | "20040248601" | "20040249490" | "20040249965" | "20040249982" | "20040252400" | "20040253969" | "20050010691" | "20050011388" | "20050013394" | "20050015551" | "20050021590" | "20050027821" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050081213" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050154766").PN.				
S1967	205	("20050159833" | "20050160270" | "20050166135" | "20050168630" | "20050170781" | "20050177643" | "20050181348" | "20050195205" | "20050195823" | "20050197725" | "20050198574" | "20050201549" | "20050215265" | "20050216556" | "20050239445" | "20050246421" |	US-PGPUB; USPAT	OR	ON	2018/12/03 17:49

		"20050262217"	"20050281255"				
		"20050283820"	"20050288805"				
		"20050289224"	"20060041639"				
		"20060049966"	"20060072489"				
		"20060095516"	"20060098936"				
		"20060119497"	"20060142034"				
		"20060143236"	"20060155721"				
		"20060161742"	"20060173844"				
		"20060173976"	"20060193454"				
		"20060222186"	"20060227985"				
		"20060259649"	"20060270395"				
		"20070003067"	"20070022207"				
		"20070038999"	"20070043847"				
		"20070047712"	"20070048713"				
		"20070054680"	"20070087686"				
		"20070142022"	"20070142944"				
		"20070143493"	"20070169115"				
		"20070180137"	"20070192156"				
		"20070249295"	"20070265031"				
		"20070271388"	"20070299778"				
		"20080002836"	"20080007649"				
		"20080007650"	"20080007651"				
		"20080018785"	"20080022320"				
		"20080025535"	"20080060084"				
		"20080072816"	"20080075295"				
		"20080077619"	"20080077620"				
		"20080086318"	"20080091771"				
		"20080120429"	"20080126943"				
		"20080144861"	"20080144864"				
		"20080146289"	"20080189272"				
		"20080205070"	"20080212786"				
		"20080215169"	"20080263010"				
		"20080303947"	"20090011798"				
		"20090017868"	"20090031336"				
		"20090062947"	"20090070434"				
		"20090077610"	"20090089327"				
		"20090100189"	"20090124289"				
		"20090157905"	"20090164655"				
		"20090193345"	"20090222115"				
		"20090222392"	"20090228919"				
		"20090251604"	"20100004983"				
		"20100031366"	"20100049835"				
		"20100087089"	"20100228740"				
		"20100284389"	"20100299639"				
		"20110001632"	"20110002487"				
		"20110066943"	"20110228944"				
		"20110316768"	"20120029671"				
		"20120030366"	"20120051567"				
		"20120060046"	"20120129446"				
		"20120148075"	"20120185771"				
		"20120192071"	"20120207290"				
		"20120237054"	"20120281058"				
		"20120290621"	"20130013757"				
		"20130018960"	"20130031475"				
		"20130038726"	"20130041954"				
		"20130047084"	"20130052940"				
		"20130070093"	"20130080599"				
		"20130094670"	"20130124664"				
		"20130129122"	"20130132837"				
		"20130159126"	"20130167029"				
		"20130174100"	"20130174223"				
		"20130179163"	"20130191454"				
		"20130197682"	"20130208911"				
		"20130208921"	"20130226323"				

		"20130230175" | "20130232416" | "20130253934" | "20130279706" | "20130287186" | "20130290504" | "20140006483" | "20140037097" | "20140064501" | "20140075308" | "20140075311" | "20140079242" | "20140108929" | "20140123005" | "20140140530" | "20140161265" | "20140181569" | "20140233755" | "20140242913" | "20140256260" | "20140267148" | "20140270202" | "20140273859" | "20140279889" | "20140285313" | "20140286496" | "20140298174" | "20140323036" | "20140344689" | "20140378056" | "20150019670" | "20150026613" | "20150032844" | "20150043736" | "20150049248" | "20150074527" | "20150074528" | "20150098576" | "20150139210" | "20150256954" | "20150304288" | "20150365987" | "3956591" | "4105974" | "4296278" | "4306114" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4816989" | "4824059" | "4845751" | "4994908" | "5086385" | "5151922" | "5153579" | "5182552" | "5185680").PN.				
S1968	280	("5198603" | "5237327" | "5239458" | "5272757" | "5299266" | "5361381" | "5372441" | "5406634" | "5430485" | "5440644" | "5457448" | "5467342" | "5481251" | "5491839" | "5515345" | "5533021" | "5553147" | "5553222" | "5553314" | "5596696" | "5602992" | "5623483" | "5625350" | "5633871" | "5636345" | "5640388" | "5652749" | "5661665" | "5661728" | "5668884" | "5673323" | "5696896" | "5726989" | "5732059" | "5740235" | "5742623" | "5751819" | "5761320" | "5774016" | "5787249" | "5790543" | "5808662" | "5812201" | "5815689" | "5818948" | "5832024" | "5838909" | "5848152" | "5852722" | "5867691" | "5875233" | "5875354" | "5887143" | "5905768" | "5917830" | "5923869" | "5923902" | "5946343" | "5956025" | "5956088" | "5960006" | "5984512" | "5987525" | "5987611" | "5990884" | "5991307" | "5999906" | "6009457" | "6018376" | "6026150" | "6029196" | "6031818" | "6032202" | "6038614" | "6046550" | "6061457" | "6078725" | "6081266" | "6088063" | "6101195" | "6108485" | "6108686" | "6122668" | "6127941" | "6128318" | "6148205" | "6154772" |	US-PGPUB; USPAT	OR	ON	2018/12/03 17:49

		"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" | "6349352" | "6351821" | "6353172" | "6356871" | "6404811" | "6418150" | "6430353" | "6442443" | "6446080" | "6449642" | "6449653" | "6456783" | "6463474" | "6466832" | "6469633" | "6487296" | "6493832" | "6522886" | "6526325" | "6526411" | "6535121" | "6587127" | "6598172" | "6611537" | "6611813" | "6631410" | "6636269" | "6639584" | "6653899" | "6654720" | "6654956" | "6658091" | "6674803" | "6684060" | "6687664" | "6704421" | "6741961" | "6757517" | "6763274" | "6778073" | "6778493" | "6778869" | "6795852" | "6803964" | "6809635" | "6816510" | "6816818" | "6823225" | "6826283" | "6836788" | "6839752" | "6859460" | "6859538" | "6873862" | "6882335" | "6898642" | "6901439" | "6907458" | "6910078" | "6912610" | "6915347" | "6917592" | "6919771" | "6920373" | "6931557" | "6934766" | "6937988" | "6970482" | "6985694" | "6987767" | "7006758" | "7007106" | "7020791" | "7043477" | "7043651" | "7046677" | "7047308" | "7054888" | "7058889" | "7068596" | "7092528" | "7092694" | "7096169" | "7102513" | "7106224" | "7113999" | "7115017" | "7120168" | "7130316" | "7130368" | "7130608" | "7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7164694" | "7167765" | "7185090" | "7187947" | "7188353" | "7197148" | "7206367" | "7206618" | "7206967" | "7209795" | "7218708" | "7218930" | "7236739" | "7236773" | "7251533" | "7257398" | "7260616" | "7263070" | "7263110" | "7277547" | "7286652" | "7289631" | "7293060" | "7295548" | "7305694" | "7308188" | "7310334" | "7312785" | "7313593" | "7319764" | "7324857" | "7330875" | "7333519" | "7356011" | "7359006" |				

		"7366206" | "7372846" | "7383036" | "7391791" | "7392102" | "7392481" | "7394480" | "7400644" | "7412499" | "7428310" | "7430181" | "7433324" | "7434166" | "7457948" | "7469139" | "7472058" | "7474677" | "7483538" | "7483540" | "7483958" | "7492912" | "7505889" | "7509181" | "7519667" | "7548744" | "7548851" | "7558224" | "7558635" | "7571014" | "7574274" | "7599685" | "7606174" | "7607091").PN.				
S1969	261	("7627825" | "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" | "7743009" | "7746906" | "7756743" | "7761176" | "7765315" | "7793206" | "7827259" | "7831054" | "7835689" | "7853341" | "7865137" | "7882234" | "7885622" | "7907819" | "7916877" | "7917082" | "7933418" | "7934239" | "7945143" | "7945636" | "7945708" | "7958441" | "7966388" | "7987294" | "7995732" | "7996566" | "7996588" | "8014423" | "8015306" | "8020023" | "8023663" | "8028038" | "8028323" | "8041062" | "8045721" | "8045952" | "8050203" | "8050652" | "8055364" | "8074253" | "8086752" | "8090317" | "8103009" | "8111132" | "8112032" | "8116476" | "8126172" | "8131389" | "8131390" | "8144883" | "8148622" | "8150079" | "8169938" | "8170222" | "8170260" | "8175297" | "8185674" | "8194874" | "8204890" | "8208653" | "8214447" | "8214740" | "8214873" | "8218790" | "8230099" | "8233029" | "8233648" | "8234305" | "8234395" | "8239748" | "8275910" | "8279709" | "8281001" | "8285404" | "8290603" | "8300845" | "8311226" | "8315555" | "8316147" | "8325931" | "8326951" | "8340330" | "8345709" | "8364295" | "8370678" | "8374595" | "8407623" | "8411883" | "8423659" | "8423893" | "8432851" | "8433076" | "8442239" | "8457334" | "8463184" | "8463875" | "8473844" | "8477958" | "8483853"	US-PGPUB; USPAT	OR	ON	2018/12/03 17:49

		"8509211" | "8520870" | "8565455" | "8577048" | "8588949" | "8600084" | "8611559" | "8615091" | "8639830" | "8654995" | "8672744" | "8683009" | "8689036" | "8731206" | "8750282" | "8751026" | "8762565" | "8775546" | "8818538" | "8819554" | "8831761" | "8843586" | "8861739" | "8868698" | "8885851" | "8904066" | "8917877" | "8930006" | "8934647" | "8934655" | "8938637" | "8942252" | "8942395" | "8954177" | "8965544" | "8966394" | "9042556" | "9130770" | "9137602" | "9160965" | "9195258" | "9456243" | "9507780" | "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.				

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; DERWENT	OR	ON	2019/01/01 18:11
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; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/02 10:39
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;	OR	ON	2019/01/02 12:48

			EPO; JPO; DERWENT			
S1983	1	"507433".ap. and learn$8	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/01/04 10:03
S2138	166138	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	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	2019/03/01 16:41
S2304	200	("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" | "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" |	US-PGPUB; USPAT	OR	ON	2019/05/24 17:12

		"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" |					
		"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").PN.				
S2305	240	("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" | "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" | "3956591" | "4105974" | "4296278" | "4306114" | "4382158" | "4509211" | "4530091" | "4696037" | "4701629" | "4712105" | "4731814" | "4816989" | "4824059" | "4845751" | "4994908" | "4995778" | "5086385" | "5151922" | "5153579" | "5182552" | "5185680" | "5237327" | "5239458"	US-PGPUB; USPAT	OR	ON	2019/05/24 17:12

		| "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").PN.				
S2306	245	("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" |	US-PGPUB; USPAT	OR	ON	2019/05/24 17:12

		"6916980" | "6917592" | "6919771" | "6920373" | "6931134" | "6931557" | "6934766" | "6937988" | "6970482" | "6985694" | "6987767" | "6987947" | "7007106" | "7020791" | "7043477" | "7043651" | "7046677" | "7047308" | "7054888" | "7058889" | "7068596" | "7072477" | "7092528" | "7092694" | "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" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" | "20010050991" | "20020002039" | "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").PN.				
S2307	255	("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" |	US-PGPUB; USPAT	OR	ON	2019/05/24 17:12

		"20150281866" | "20150286360" | "20150304288" | "20150365987" | "20170188152" | "7096169" | "7113999" | "7115017" | "7120168" | "7130316" | "7130368" | "7130608" | "7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "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" | "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").PN.				
S2308	95	("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").PN.	US-PGPUB; USPAT	OR	ON	2019/05/24 17:12
S2479	1506	"s298"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/06/06 19:47
S2480	9237	"s98"	US-PGPUB;	OR	ON	2019/06/06 19:48

			USPAT; EPO; JPO; DERWENT			
S2528	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" | "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"	US-PGPUB; USPAT	OR	ON	2019/06/07 08:30

		"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.				
S2529	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" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:30

		"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.				
S2530	261	("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"	US-PGPUB; USPAT	OR	ON	2019/06/07 08:30

		| "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" | "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.				
S2531	280	("7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "7197148" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:30

		"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" | "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").PN.				
S2532	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" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:30

		"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.				
S2544	3	"20050195999"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:40
S2545	3	"20050195999" and display$6	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 12:44
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
S2550	200	("10133536" | "20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" | "20010043456" | "20010046235" | "20010047377" |	US-PGPUB; USPAT	OR	ON	2019/08/22 14:11

		"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"	"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" | "20050021470" | "20050021590" | "20050027821" | "20050031135" | "20050047605" | "20050058149" | "20050060435" | "20050062637" | "20050069153" | "20050081213" | "20050100174" | "20050105052" | "20050114538" | "20050120128" | "20050125222" | "20050125357" | "20050131558" | "20050144284").PN.				
S2551	200	("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" | "20060205349" | "20060222186" | "20060227985" | "20060229752" | "20060259649" | "20060270395" | "20060294569" | "20070003067" | "20070003075" | "20070022207" | "20070038999" | "20070043847" | "20070047712" | "20070048713" | "20070054680" | "20070071255" | "20070087686" | "20070142022" | "20070142944" | "20070143493" | "20070169115" | "20070180137" | "20070189544" | "20070192156" |	US-PGPUB; USPAT	OR	ON	2019/08/22 14:11

		"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"	"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"	"20130226323"				
		"20130230175"	"20130232416"				
		"20130236029"	"20130243199"				

		"20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20140006483").PN.				
S2552	260	("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" | "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" |	US-PGPUB; USPAT	OR	ON	2019/08/22 14:11

		"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" | "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").PN.				
S2553	280	("7130316" | "7130368" | "7130608" | "7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "7197148" | "7206367" | "7206618" | "7206967" | "7209795" | "7218708" | "7236739" | "7236773" | "7257398" | "7260616" | "7263110" | "7277547" | "7286652" | "7289631" | "7293060" | "7295548" | "7302468" | "7305694" | "7308188" | "7310334"	US-PGPUB; USPAT	OR	ON	2019/08/22 14:11

		"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" | "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" | "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" | "9112622" | "9137602").PN.				
S2554	100	("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" |	US-PGPUB; USPAT	OR	ON	2019/08/22 14:11

		"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.				
S2555	1040	S2550 S2551 S2552 S2553 S2554	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 14:35
S2556	1	S2555 and "20050195999"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/08/22 14:35
S2557	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" | "20020136335" | "20020137505" | "20020143547" | "20020143998" | "20020150053" | "20020159596" | "20020163361" | "20020165721" | "20020165921" | "20020168938" | "20020173273" | "20020177411" | "20020181355" | "20020184310" | "20020188762" | "20020194309" | "20020196951" | "20030002609" | "20030002689" | "20030008616" | "20030014486" | "20030018797" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:29

		"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"	"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.				
S2558	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" | "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" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:29

		"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.				
S2559	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" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:29

		"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" | "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" |			

		"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.				
S2560	280	("7130616" | "7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "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" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032"	US-PGPUB; USPAT	OR	ON	2019/08/30 17:29

		"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").PN.				
S2561	95	("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.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:29
S2684	15	"166518".ap.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2019/10/14 09:06

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	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 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	2014/05/16 12:15

		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	83800	S93 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2014/05/16 12:25
S95	5669	S93 and ($6zone scene configu$8) and discov$6	US-PGPUB; USPAT	OR	ON	2014/05/16 12:28
S96	2883	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	9885	S93 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2014/05/16 12:29
S98	2917	S93 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:29
S99	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	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30

		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.)				
S100	98841	S93 and "16"	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S101	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 12:30
S102	3065	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	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 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	2014/05/16 12:32

		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.)				
S106	3448	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	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 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	2014/05/16 13:26

		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	2883	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	8030	($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	US-PGPUB;	OR	ON	2014/05/16 14:31

		(sync synchron$8)	USPAT			
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	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 14:32
S122	4814	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	4362	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	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	2014/05/16 14:34
S129	3019	(zone scene config$9) with play$4 and play$5 with different near3 (song media	US-PGPUB;	OR	ON	2014/05/16 14:34

		content) and (sync synchron$8)	USPAT			
S130	1479	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	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	2014/05/16 20:51
S133	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	2014/05/16 20:51
S134	1479	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	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	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		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.)				
S137	139546	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR H04S3/002 OR H04S2420/13 OR	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		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.)				
S138	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52
S139	3065	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	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	US-PGPUB; USPAT	OR	ON	2014/05/16 20:52

		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.)				
S142	83800	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;	OR	ON	2014/05/16 21:31

			USPAT			
S163	139776	((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 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	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18

		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	7856	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/05/19 09:18
S165	3070	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	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 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	2014/07/15 11:05
S176	1530	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	3139	((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	1452	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	3139	((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	1452	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2014/07/15 13:17
S205	1452	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	107060	((G10L19/008 OR G10L19/167 OR	US-	OR	ON	2014/11/26

		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	PGPUB; USPAT			13:54	

		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	3224	S240 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:54
S242	3224	S241	US-PGPUB; USPAT	OR	ON	2014/11/26 13:54
S243	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 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	2014/11/26 13:55
S244	58727	S243	US-	OR	ON	2014/11/26

			PGPUB; USPAT			13:55
S245	8643	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S246	8643	S245	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S247	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 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	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56

		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	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:56
S249	5166	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	5166	S249	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S253	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 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	2014/11/26 13:57

		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.)				
S254	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S255	3355	S254 and S253	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S256	3355	S255	US-PGPUB; USPAT	OR	ON	2014/11/26 13:57
S257	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 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	2014/11/26 13:58

		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	107060	S257	US-PGPUB; USPAT	OR	ON	2014/11/26 13:58
S259	78439	S257 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2014/11/26 13:59
S260	78439	S259	US-PGPUB; USPAT	OR	ON	2014/11/26 13:59
S261	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	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09

		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.)				
S262	8352	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09
S263	3355	S262 and S261	US-PGPUB; USPAT	OR	ON	2014/11/26 14:09
S264	3355	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	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	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16

		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.)				
S268	1604	second near3 play$5 near4 (media song title) and S267	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16
S269	1604	S268	US-PGPUB; USPAT	OR	ON	2014/11/26 14:16
S270	3221	((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	1107880	(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	4901	(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;	OR	ON	2014/11/26 15:08

			USPAT			
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	1282	(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	1189	(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	3221	S270	US-PGPUB; USPAT	OR	ON	2014/11/26 15:45
S294	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 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	2014/12/01 10:16

		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	3229	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	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:18

S299	5167	S294 and S298	US-PGPUB; USPAT	OR	ON	2014/12/01 10:19
S300	1827	(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	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 10:40
S313	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	US-PGPUB; USPAT	OR	ON	2014/12/01 10:40

		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.)				
S314	3740	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" |	US-PGPUB; USPAT	OR	ON	2014/12/01 10:58

		"20070065794" | "20070293250" | "20080045140" | "20080139229" | "20080216125" | "20090168088" | "20090213032" | "20090272251" | "20100033402" | "20100041330" | "7012185" | "7091926" | "7164906" | "7297858" | "7453418" | "7483080" | "7489323" | "8044289" | "RE42565").PN.				
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	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 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	2014/12/01 11:12

		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	8355	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2014/12/01 11:12
S326	3356	S325 and S324	US-	OR	ON	2014/12/01

			PGPUB; USPAT			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	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	2015/05/07 10:49
S512	3548	S511	US-PGPUB; USPAT	OR	ON	2015/05/07 10:49
S513	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 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	2015/05/07 11:12

		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.)				
S514	1681	second near3 play$5 near4 (media song title) and S513	US-PGPUB; USPAT	OR	ON	2015/05/07 11:12
S515	1681	S514	US-PGPUB; USPAT	OR	ON	2015/05/07 11:12
S516	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 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	1681	second near3 play$5 near4 (media song title) and S516	US-PGPUB; USPAT	OR	ON	2015/05/07 11:13
S518	1681	S517	US-PGPUB; USPAT	OR	ON	2015/05/07 11:13
S519	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	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	8708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/05/07 11:16
S521	5414	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	5119	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	3358	((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	3358	((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	1666	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	US-	OR	ON	2015/05/07

		different near3 (song media content) and (sync synchron$8) and "s88"	PGPUB; USPAT			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	3358	((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	18034	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	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 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 12:30

		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	8708	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/05/07 12:30
S547	5414	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	1621	(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	3694	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:31
S551	15779	(zone scene config$9) with play$4 and S545	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32
S552	1117	S550 and S551	US-PGPUB; USPAT	OR	ON	2015/05/07 12:32
S553	1354	(network$6) near3 (playback adj device	US-	OR	ON	2015/05/07

		$6speaker transducer) and S545	PGPUB; USPAT			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	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 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	US-PGPUB; USPAT	OR	ON	2015/05/07 12:56

		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	3358	((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	5371	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	US-PGPUB;	OR	ON	2015/05/08 16:33

		"5.1" multi$6 near2 channel joint near3 stereo) same $5speaker and network$6	USPAT			
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	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 OR H04S7/307	US-PGPUB; USPAT	OR	ON	2015/10/13 10:46

		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.)				
S592	12432	S591 and ($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2015/10/13 10:46
S593	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	2015/10/13 10:57
S594	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	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58

		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.)				
S595	8932	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58
S596	186607	S594 S595	US-PGPUB; USPAT	OR	ON	2015/10/13 10:58
S597	1162	(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	1772	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2015/10/13 10:59
S599	1662198	(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;	OR	ON	2015/10/13 10:59

			USPAT			
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	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 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	2015/10/13 11:27

		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.)				
S611	3995	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S610	US-PGPUB; USPAT	OR	ON	2015/10/13 11:27
S612	4352	(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	3776	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	5373	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	US-	OR	ON	2015/10/13

		near9 (config$8 count$5) and (count$4 surround "5.1" multi$3channel $6channel) same request$6	PGPUB; USPAT			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	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	US-PGPUB; USPAT	OR	ON	2016/01/11 14:33

		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	3683	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	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	2016/01/11 14:36
S639	35933	S638 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S640	20704	S638 and ($6zone scene configu$8).clm.	US-PGPUB; USPAT	OR	ON	2016/01/11 14:36
S641	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	2016/01/11 14:36
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	1043	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	1945	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;	OR	ON	2016/01/11 14:41

			USPAT			
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	2363	(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	183438	(scene config$6 zone network$4) with play$4	US-PGPUB; USPAT	OR	ON	2016/01/11 14:50
S656	7355	(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	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 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	2016/02/02 13:51

		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.)				
S674	3856	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	3769	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	2617	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	US-	OR	ON	2016/02/02

		set$4up snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	PGPUB; USPAT			13:54
S679	3186	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	31661	($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	10647	($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	10192	($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	10083	($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	31661	($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	1044	(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	29687	($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	US-	OR	ON	2016/02/02

		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)	PGPUB; USPAT			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	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 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	US-PGPUB; USPAT	OR	ON	2016/02/02 14:27

		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	2111	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	1305	(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" |	US-PGPUB; USPAT	OR	ON	2016/02/04 13:19

		"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.				
S718	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 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	2016/02/04 13:19

		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.)				
S719	1305	(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" |	US-PGPUB; USPAT	OR	ON	2016/03/10 10:41

		"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.				
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	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	US-PGPUB; USPAT	OR	ON	2016/05/27 13:27

		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.)				
S821	3989	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	121310	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR	US-PGPUB;	OR	ON	2016/05/27 13:28

		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	USPAT				

		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	10655	($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	10543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S827	10655	S824 S825 S826	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S828	4189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:28
S829	1150	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	34399	detect$6 near3 signal and automat$8 near3 switch$6	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S831	5915	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S832	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	2016/05/27 13:29
S833	1071	S832 and (stereo mono monaural left right)	US-PGPUB; USPAT	OR	ON	2016/05/27 13:29
S834	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	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;	OR	ON	2016/05/27 13:30

			USPAT			
S837	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 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	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01

		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	10655	($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	10543	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S841	10655	S838 S839 S840	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S842	10655	S841	US-PGPUB; USPAT	OR	ON	2016/05/27 15:01
S843	4189	plural$4 near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2016/05/27 15:02
S844	4189	S843	US-PGPUB; USPAT	OR	ON	2016/05/27 15:02
S904	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	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13

		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.)				
S905	9205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2016/08/10 11:13
S906	3967	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	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 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	2016/08/10 11:53

		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	4514	second near3 (speaker transducer loud$5speaker playback near2 device) same (media song title)	US-PGPUB; USPAT	OR	ON	2016/08/10 11:53
S911	2527	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	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	2016/08/10 11:54

S913	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	2016/08/10 12:26
S914	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 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	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41

		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	9205	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2016/08/10 12:41
S916	5859	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	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	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	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	2016/08/10 13:26
S922	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	2016/08/10 13:26
S923	243	S921 and S922	US-PGPUB; USPAT	OR	ON	2016/08/10 13:26
S924	1737	((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	US-PGPUB; USPAT	OR	ON	2016/08/10 13:44

		loud$3speaker).clm.)				
S926	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	2016/08/10 13:45
S927	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	2016/08/10 13:45
S928	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 S921	US-PGPUB; USPAT	OR	ON	2016/08/10 13:46
S929	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 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	1195	zone with play$4 and play$5 with	US-	OR	ON	2016/08/10

		different near3 (song media content) and (sync synchron$8)	PGPUB; USPAT			15:05
S939	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	2016/08/10 15:05
S940	176	S938 and S939	US-PGPUB; USPAT	OR	ON	2016/08/10 15:05
S941	6090	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	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 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	US-PGPUB; USPAT	OR	ON	2016/08/10 15:20

		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	19755	(700/94 OR 715/716 OR 381/109 OR 381/56 OR 381/58 OR 381/80 OR 705/16	US-PGPUB;	OR	ON	2016/08/10 15:20

		OR 725/25 OR 726/28).CCLS.	USPAT			
S945	11442	($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	10821	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2016/08/10 15:21
S947	34398	($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	32223	($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 pair$4).clm. (stereo surround$4 "5.1" sub$3woof$4 pair$4).ab.)	US-PGPUB; USPAT	OR	ON	2016/08/10 15:43
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"	US-PGPUB; USPAT	OR	ON	2017/01/03 10:42

		"20020072816" "6931557").pn.				
S1013	0	S1011 and S1012	US-PGPUB; USPAT	OR	ON	2017/01/03 10:42
S1014	3841	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	10984	voxel$6	USPAT	OR	ON	2017/01/03 12:14
S1024	2723	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	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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07

		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.)				
S1030	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:07
S1031	4049	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	4049	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	11621	($6zone scene configu$8).ab. and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:31
S1039	1325	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	12924	S1038 S1039	US-PGPUB; USPAT	OR	ON	2017/02/17 11:31
S1041	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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		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.)				
S1042	4349	S1030 and S1041	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1043	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 G10L25/12 OR G10L25/18 OR H04S2420/03 OR	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		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.)				
S1044	131115	S1043	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1045	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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40

		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.)				
S1046	138609	S1045	US-PGPUB; USPAT	OR	ON	2017/02/17 11:40
S1047	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 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	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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		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	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 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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		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	365944	S1047 S1048 S1049	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1051	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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41

		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.)				
S1052	131115	S1051	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1053	100965	S1051 and ($6zone scene configu$8)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1054	100965	S1053	US-PGPUB; USPAT	OR	ON	2017/02/17 11:41
S1055	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 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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		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	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB;	OR	ON	2017/02/17 11:42

			USPAT			
S1057	231903	S1056 S1055	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1058	4213	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1059	4213	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1060	4213	S1058 S1059	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1061	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1062	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 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	2017/02/17 11:42
S1063	80565	S1061 S1062	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

S1064	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 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	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42

		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	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1066	134409	S1064 S1065	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1067	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 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	2017/02/17 11:42

		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	226745	S1067	US-PGPUB; USPAT	OR	ON	2017/02/17 11:42
S1069	385172	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	304007	S1069 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:45
S1071	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	2017/02/17 11:47
S1072	3397	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1071	US-PGPUB; USPAT	OR	ON	2017/02/17 11:47
S1073	13696	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1069	US-PGPUB; USPAT	OR	ON	2017/02/17 11:48
S1074	11715	S1070 and S1073	US-PGPUB; USPAT	OR	ON	2017/02/17 11:49
S1075	4245	S1074 and (surround multi$channel multipl$5 near2 chanel "5.1" mpeg$4 aes$3)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:50
S1076	3345	S1074 and (surround multi$channel multipl$5 near2 chanel "5.1" mpeg$4 aes$3) and wireless$4	US-PGPUB; USPAT	OR	ON	2017/02/17 11:51
S1077	2466	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:52
S1078	3193	S1074 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair group$4)	US-PGPUB; USPAT	OR	ON	2017/02/17 11:53
S1079	1829	S1074 and (surround multi$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	861352	((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	1038	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" |	US-PGPUB; USPAT	OR	ON	2017/02/17 12:04

		"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" | "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"	US-	OR	ON	2017/02/17

		"7987294" "6487296" "20040037433" "5361381" "7853341" "7653344").pn.	PGPUB; USPAT			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" | "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" |	US-PGPUB; USPAT	OR	ON	2017/02/28 12:40

		"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" | "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"	US-PGPUB; USPAT	OR	ON	2017/02/28 12:40

		| "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	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 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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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.)				
S1096	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 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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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	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 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	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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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.)				
S1099	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 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	2017/02/28 12:41

		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	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 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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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.)				
S1101	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 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	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 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	2017/02/28 12:41

		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	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1104	4222	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1105	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1106	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 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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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	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 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	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41

		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	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1109	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 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	2017/02/28 12:41

		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	386374	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	305122	S1110 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1112	13745	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1110	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1113	11762	S1111 and S1112	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1114	1842	S1113 and (surround multi$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	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	2017/02/28 12:41
S1116	1051	S1114 and S1115	US-PGPUB; USPAT	OR	ON	2017/02/28 12:41
S1117	1331	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	15625	(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	16704	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	12295	($6zone scene configu$8 set$4up	US-	OR	ON	2017/02/28

		snap$3shot cad) same (speaker transducer loud$5speaker playback near2 device).ab.	PGPUB; USPAT			12:44
S1122	11605	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1123	37335	($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	34922	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1125	41076	S1121 S1122 S1123 S1124	US-PGPUB; USPAT	OR	ON	2017/02/28 12:44
S1126	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 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	2017/03/15 12:22
S1127	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	2017/03/15 12:22

		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.)				
S1128	139524	((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	139524	((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	2017/03/15 12:22

		H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S1130	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 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	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		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	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 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	2017/03/15 12:22

		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	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 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	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		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	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 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.)				
S1134	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

S1135	4243	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1136	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1137	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 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	2017/03/15 12:22
S1138	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	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.)				

S1139	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1140	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 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	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22

		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	388327	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	306969	S1141 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1143	13828	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1141	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1144	11841	S1142 and S1143	US-PGPUB; USPAT	OR	ON	2017/03/15 12:22
S1145	1869	S1144 and (surround multi$channel	US-	OR	ON	2017/03/15

		multipl$5 near2 channel "5.1" mpeg$4 aes$3 lfe) and wireless$4 and (stereo pair group$4) and pair$4	PGPUB; USPAT			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	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	2017/03/15 13:13
S1153	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	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	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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.)				
S1180	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 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	2017/03/18 14:57

		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.)				
S1181	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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	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	2017/03/18 14:57
S1183	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	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.)				
S1184	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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.)				
S1185	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 H04S2420/03 OR H04S3/008 OR H04S1/007 OR	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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.)				
S1187	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1188	4247	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1189	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1190	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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.)				
S1191	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 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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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.)				
S1192	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1193	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	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57

		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	388692	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	13865	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S1194	US-PGPUB; USPAT	OR	ON	2017/03/18 14:57
S1196	4103	S1179 and S1195	US-PGPUB; USPAT	OR	ON	2017/03/18 15:09
S1197	2164	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	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	2017/03/18 15:12
S1200	1267	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	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	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23

		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.)				
S1204	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:23
S1205	5920	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	6109604	s "167"	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1214	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	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41

		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.)				
S1215	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 15:41
S1216	4054	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	1350	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	1350	S1219	US-PGPUB; USPAT	OR	ON	2017/03/18 15:44
S1221	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	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45

		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.)				
S1222	139622	S1221	US-PGPUB; USPAT	OR	ON	2017/03/18 15:45
S1223	4247	((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	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	2017/03/18 15:52
S1228	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 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	2017/03/18 16:01

		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.)				
S1229	9207	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1230	5920	S1228 and S1229	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1231	2768	(output pair$5 channel surround$4 lfe) same config$8 and S1230	US-PGPUB; USPAT	OR	ON	2017/03/18 16:01
S1232	3536	(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;	OR	ON	2017/03/18 16:33

			USPAT			
S1265	6195	group$6 with volume near2 (control$4 adjust$6 command$4 instruct$4)	US-PGPUB; USPAT	OR	ON	2017/03/21 11:38
S1266	2631640	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	1275	(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	10981	((G06F3/165 g06f3/162).CPC. (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:36
S1306	225743	($6zone scene configu$8) same (speaker transducer loud$3speaker)	US-PGPUB; USPAT	OR	ON	2017/03/27 16:36
S1307	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	2017/03/27 16:37
S1308	546	S1307 and S1305	US-PGPUB; USPAT	OR	ON	2017/03/27 16:39
S1309	10278	($6zone scene configu$8) same (speaker	US-	OR	ON	2017/03/27

		transducer loud$3speaker) same (group$6 bus$4 sub$group$4 sub$mix$6) and ($6zone scene configu$8) near6 (display$5)	PGPUB; USPAT			16:39
S1310	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	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	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	2017/03/27 16:53
S1317	9	("2008/0141134").URPN.	USPAT	OR	ON	2017/03/27 16:55
S1318	9129	(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	357787	(without "not") with display$6	US-PGPUB;	OR	ON	2017/03/27 17:43

			USPAT			
S1326	160219	(without "not" does) near3 display$6	US-PGPUB; USPAT	OR	ON	2017/03/27 17:43
S1327	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	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 display$6) same (group$6 zone config$8 scene snap$shot) and $5speaker	US-PGPUB; USPAT	OR	ON	2017/03/27 17:55
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	12434	($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	11734	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1337	37769	($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	35330	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/03/27 18:48
S1339	41526	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	12465	($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	11763	($6zone scene configu$8) same (speaker transducer loud$5speaker).ab.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1368	37880	($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	35436	($6zone scene configu$8) same (speaker transducer loud$5speaker).clm.	US-PGPUB; USPAT	OR	ON	2017/03/31 16:22
S1370	41640	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	11885	($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	35617	($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)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:25

		near2 interface)				
S1377	10274	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	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	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) near2 interface) and (time season day month year strength power signal)	US-PGPUB; USPAT	OR	ON	2017/03/31 16:30
S1386	33	S1381 and S1385	US-PGPUB; USPAT	OR	ON	2017/03/31 16:44
S1387	1244	(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-	OR	ON	2017/03/31

			PGPUB; USPAT			16:55
S1391	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	2017/03/31 17:01
S1392	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	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	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)	US-PGPUB; USPAT	OR	ON	2017/03/31 17:14
S1395	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 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$8) and S1381	US-PGPUB; USPAT	OR	ON	2017/03/31 17:14
S1397	964	S1395 and S1396	US-PGPUB; USPAT	OR	ON	2017/03/31 17:16
S1479	9	"Term Removed"	US-PGPUB; USPAT	OR	ON	2017/04/21 08:38
S1480	1	"20150058727"	US-PGPUB; USPAT	OR	ON	2017/04/21 08:38
S1481	60297	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. OR (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:39
S1482	1653	((G05B15/02 OR G06F3/0482 OR G06F3/04842 OR G06F3/16 OR G06F3/165 OR H03G1/02 OR H03G7/00 OR H04H60/80 OR H04N21/43615 OR H04R2227/005 OR H04R2430/01 OR H04R27/00 OR H04R3/12).CPC. and (715/716 700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2017/04/21 08:39
S1483	6992	S1481 and (speaker loud$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	4424	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	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	2018/08/08 16:13
S1572	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	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13

		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	1149	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	1149	S1573	US-PGPUB; USPAT	OR	ON	2018/08/08 16:13
S1575	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	2018/08/08 16:16
S1576	5595	S1575	US-PGPUB; USPAT	OR	ON	2018/08/08 16:16
S1577	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	2018/08/08 16:17
S1578	39329	(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	1702646	(output pair$5 channel surround$4) with config$8	US-PGPUB; USPAT	OR	ON	2018/08/08 16:18
S1580	40904	(output pair$5 channel surround$4) with config$8 and S1572	US-PGPUB; USPAT	OR	ON	2018/08/08 16:18
S1581	59540	(output pair$5 channel surround$4) with (kind type config$8) and S1572	US-PGPUB; USPAT	OR	ON	2018/08/08 16:23
S1582	1852	S1581 and S1578	US-PGPUB; USPAT	OR	ON	2018/08/08 16:23
S1583	1186	(zone scene config$9) with play$4 and S1582	US-PGPUB; USPAT	OR	ON	2018/08/08 16:24
S1584	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	2018/08/08 16:24
S1585	1	"20070087686"	US-PGPUB; USPAT	OR	ON	2018/08/08 16:25
S1586	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	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-	OR	ON	2018/08/08

			PGPUB; USPAT			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	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" | "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" |	US-PGPUB; USPAT	OR	ON	2018/08/08 16:51

		"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" | "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").PN. OR ("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" | "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").PN. OR ("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").PN.				
		OR ("20130129122" | "20130132837" | "20130159126" | "20130167029" | "20130174100" | "20130174223" | "20130179163" | "20130191454" | "20130197682" | "20130208911" | "20130208921" | "20130226323" | "20130230175" | "20130232416" | "20130243199" | "20130253679" | "20130253934" | "20130259254" | "20130279706" | "20130287186" | "20130290504" | "20130293345" | "20130305152" | "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" | "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").PN. OR ("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").PN. OR ("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"	"7136934"	"7139981"			
		"7143141"	"7143939"	"7146260"			
		"7158488"	"7161939"	"7162315"			
		"7171010"	"7185090"	"7187947"			
		"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").PN. OR ("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"	"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").PN. OR ("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" | "9219959" | "9226073" | "9245514" | "9325286" | "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").PN. OR ("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. OR ("9928026").URPN.				
S1599	148	S1598 and S1581	US-	OR	ON	2018/08/08

			PGPUB; USPAT			16:59
S1600	3	S1599 and S1587	US-PGPUB; USPAT	OR	ON	2018/08/08 16:59
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	1746053	(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	65108	second near3 (speaker transducer loud$5speaker playback near2 device)	US-PGPUB; USPAT	OR	ON	2018/08/08 17:27
S1609	119610	(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	2408	(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	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	2018/08/08 18:08
S1614	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 G10L15/04 OR G10L15/18 OR G10L15/20 OR	US-PGPUB; USPAT	OR	ON	2018/08/08 18:10

		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.)				
S1615	5992	S1614 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2018/08/08 18:10
S1616	12629	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	2566	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 OR H02B1/00 OR H03G3/10 OR H03G3/3026).CPC. OR (700/94).CCLS.)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:21
S1766	969440	(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	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	2018/08/22 12:29
S1769	20344	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	10063	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	530410	(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	6402846	(zone snapshot snap adj shot grouping grouped groupwise scene configure configuration)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:52
S1778	2566	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2018/08/22 12:52
S1779	2566	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	969440	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	2018/08/22 12:53
S1783	969440	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	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	2018/08/22 12:53
S1787	20344	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	20344	S1786	US-PGPUB; USPAT	OR	ON	2018/08/22 12:54
S1790	20344	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	10063	S1782 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

S1794	10063	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	530410	(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	530410	S1797	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1799	530410	S1797	US-PGPUB; USPAT	OR	ON	2018/08/22 12:55
S1800	666516	S1777 and S1782	US-PGPUB; USPAT	OR	ON	2018/08/22 12:56
S1801	1105	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" | "20160249437" | "20160295340" | "20160353217" | "20160379638" | "7643894" | "8725277" | "8874448" | "9087520" | "9271111" | "9484030").PN. OR ("9898250").URPN.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:22
S1806	66	("20010042107" | "20020022453" | "20020026442" | "20020124097" | "20030157951" | "20040024478" | "20070142944" | "20080152312" | "20090076881" | "20090179867" | "20090234476" | "20100017714" | "20100325239" | "20120054278" | "20130243199" | "20130317635" | "20130331970" | "20130339397" | "20140037107" | "20140093085" |	US-PGPUB; USPAT	OR	ON	2018/08/22 13:42

		"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.				
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	2333	activ$6 with audio with detect$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1810	969440	(input audio) with (activat$6 detect$6)".ab,clm.'"	US-PGPUB; USPAT	OR	ON	2018/08/22 13:44
S1811	255081	(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 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 13:45
S1813	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	2018/08/22 13:45
S1814	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	2018/08/22 13:47
S1815	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	2018/08/22 13:47
S1816	157627	S1777 and S1811	US-PGPUB; USPAT	OR	ON	2018/08/22 13:47
S1817	3660	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	101527	(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	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	2018/11/30 11:50
S1932	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	2018/11/30 11:50
S1933	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	2018/11/30 11:50
S1934	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	2018/11/30 11:50
S1935	225443	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 11:51
S1936	5941	S1926 and S1935	US-PGPUB; USPAT	OR	ON	2018/11/30 12:17
S1937	1466	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	52187	((G06F17/30026 OR G06F3/04842 OR	US-	OR	ON	2018/11/30

		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.)	PGPUB; USPAT			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	347182	(scene config$6 zone network$4 snap$shot) with ($6speaker play$4)	US-PGPUB; USPAT	OR	ON	2018/11/30 13:02
S1947	413139	(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	410155	(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	347182	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	227864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1986	102325	(second third nick) near2 nam$3 nick$name	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1987	227864	(zone scene config$9 snap$shot) with ($5speaker play$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1988	6011	S1986 and S1987	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1989	6011	S1988	US-PGPUB; USPAT	OR	ON	2019/01/04 17:12
S1990	1483	S1986 and S1987 and (stereo surround	US-	OR	ON	2019/01/04

		"5.1")	PGPUB; USPAT			17:16
S1991	1483	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	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 H04S3/008 OR H04S7/308).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:16
S1995	52883	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	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	2019/01/04 17:17
S1999	14369	S1998	US-PGPUB; USPAT	OR	ON	2019/01/04 17:17
S2000	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	2019/01/04 17:17
S2001	4975	((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	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	2019/01/04 17:17
S2005	63	S2004 and (S2001 S2002)	US-	OR	ON	2019/01/04

			PGPUB; USPAT			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	999322	(input audio) with (activat$6 detect$6)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2010	10717	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	10717	S2010	US-PGPUB; USPAT	OR	ON	2019/01/04 17:27
S2012	10717	S2010	US-PGPUB; USPAT	OR	ON	2019/01/04 17:28
S2013	10717	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	477374	(bond$4 exclus$6 dynamic$6) with (zone scene config$8 snap$shot)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:36
S2017	2701530	(output pair$5 channel surround$4) with (kind type config$8)	US-PGPUB; USPAT	OR	ON	2019/01/04 17:37
S2018	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	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	1009	party near2 mode same (icon display$6 control$6 command$6) same$5speaker	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49
S2022	1009	S2021	US-PGPUB; USPAT	OR	ON	2019/01/04 17:49

S2023	1009	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	3458	"s1509"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:01
S2035	5749	"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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		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.)				
S2039	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 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	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	2019/01/04 18:02

		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.)				
S2041	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 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	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	2019/01/04 18:02

		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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		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.)				
S2044	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 H04S5/02 OR H04S7/00 OR H04S7/305 OR G11B2020/10546 OR G11B20/10527	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		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.)				
S2046	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2047	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2048	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2049	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	2019/01/04 18:02

		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.)				
S2050	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 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	2019/01/04 18:02

		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	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2052	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02

		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	462039	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	376490	S2053 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2055	18386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2053	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2056	16247	S2054 and S2055	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2057	2869	S2056 and (surround multi$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	2869	S2057	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2059	16247	S2056	US-PGPUB; USPAT	OR	ON	2019/01/04 18:02
S2060	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	2019/01/04 18:04
S2061	9225	S2048	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2062	9225	S2046	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2063	94737	S2038	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2064	1870	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	1870	S2064	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

S2066	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	2019/01/04 18:05
S2067	21659	S2066	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2068	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 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	2019/01/04 18:05
S2069	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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.)				

S2070	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 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	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 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
S2072	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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.)				
S2073	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 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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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	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	2019/01/04 18:05

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2077	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2078	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2079	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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.)				
S2080	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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.)				
S2081	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2082	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05

		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.)				
S2083	462039	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	376490	S2083 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2085	376490	S2084	US-PGPUB; USPAT	OR	ON	2019/01/04 18:05
S2086	9225	S2078	US-PGPUB; USPAT	OR	ON	2019/01/04 18:17
S2087	4975	S2077	US-PGPUB; USPAT	OR	ON	2019/01/04 18:17
S2088	1129	"s1090"	US-PGPUB; USPAT	OR	ON	2019/01/04 18:18
S2089	155341	S2072	US-PGPUB; USPAT	OR	ON	2019/01/04 18:18
S2090	94737	((G10L19/008 OR G10L19/00 OR G10L19/24 OR G10L19/0017 OR	US-PGPUB;	OR	ON	2019/01/04 18:25

		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.)	USPAT			
S2091	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	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.)				
S2092	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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	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 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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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	287861	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR	US-PGPUB;	OR	ON	2019/01/04 18:25

		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 H04R1/1083 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	USPAT					

		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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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.)				
S2097	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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.)				
S2098	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2099	4975	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2100	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2101	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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.)				
S2102	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 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 18:25

		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.)				
S2103	9225	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2104	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	2019/01/04 18:25

		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	462039	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	376490	S2105 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2107	18386	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2105	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2108	16247	S2106 and S2107	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25
S2109	905	S2108 and (surround multi$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	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	US-PGPUB; USPAT	OR	ON	2019/01/04 18:25

		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.)				
S2111	7343	(digital wireless network$6) near3 (playback adj device $6speaker	US-PGPUB;	OR	ON	2019/01/04 18:25

		transducer) and S2110	USPAT			
S2112	2683	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/01/04 18:26
S2113	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	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	1920308	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	2019/01/04 18:31
S2116	781874	(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	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2118	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/04 18:32
S2119	24977	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	2787	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	3228	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	781874	(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	781874	(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	212928	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/01/05 11:41
S2131	3228	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	1907	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	1907	S2139	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2141	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	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09

		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	96104	S2141	US-PGPUB; USPAT	OR	ON	2019/02/22 14:09
S2143	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	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	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	2019/02/22 14:11
S2146	92622	(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	96180	(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	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	2019/02/22 14:13
S2149	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	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	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	US-PGPUB; USPAT	OR	ON	2019/02/22 14:24

		environ$6) fader operator) same (relation$6 proportion$6)				
S2152	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	2019/02/22 14:26
S2153	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	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	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	2019/02/22 14:29
S2157	136058	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	2019/02/22 14:29
S2158	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	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	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	2019/02/22 14:44
S2162	1464	(mixer ui gui user near3 (interfac$5 environ$6) fader operator) same (relation$6 proportion$6 optim$8	US-PGPUB; USPAT	OR	ON	2019/02/22 14:45

		config$6 group$6).ab,clm. and ("381".clas. 700/94.ccls.)				
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	1045	(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	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	2019/02/22 14:50
S2170	59474	("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	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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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.)				
S2174	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 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	2019/02/22 15:09

		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	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 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	2019/02/22 15:09

		H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2176	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 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	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 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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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.)				
S2178	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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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.)				
S2179	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 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	2019/02/22 15:09

		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	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 H04R1/02 OR	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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.)				
S2181	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2182	5012	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2183	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2184	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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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.)				
S2185	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 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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2187	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 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	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09

		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	456352	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	18243	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2188	US-PGPUB; USPAT	OR	ON	2019/02/22 15:09
S2190	3191	(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	37788	S2188 and S2170	US-PGPUB; USPAT	OR	ON	2019/02/22 15:35
S2192	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	2019/02/22 15:35
S2193	5592	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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2197	62985	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2198	41299	S2188 and S2197	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2199	3261	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2198	US-PGPUB; USPAT	OR	ON	2019/02/22 16:42
S2200	1272	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	5617	(S2197 S2188) and S2169	US-PGPUB;	OR	ON	2019/02/22 16:47

			USPAT			
S2203	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	2019/02/22 16:47
S2204	18997	(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	64317	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/02/22 16:49
S2206	38783	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	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	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	6886	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	2418	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-	OR	ON	2019/03/01

			PGPUB; USPAT			16:42
S2223	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	2019/03/01 16:47
S2224	7045	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	2466	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	1588775	(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	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	2019/03/20 09:59
S2235	22355	S2234	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2236	798725	(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	215571	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2238	25617	S2236 and S2237	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2239	25617	S2238	US-PGPUB;	OR	ON	2019/03/20 09:59

			USPAT			
S2240	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 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
S2241	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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.)				
S2242	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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.)				
S2243	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 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	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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.)				
S2247	290900	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR	US-PGPUB;	OR	ON	2019/03/20 09:59

		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 H04R1/1083 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	USPAT					

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2249	5050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2250	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2251	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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.)				
S2252	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 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.)				
S2253	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2254	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	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59

		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.)				
S2255	459201	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	374433	S2255 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2257	374433	S2256	US-PGPUB; USPAT	OR	ON	2019/03/20 09:59
S2258	48351	(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	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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.)				
S2260	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 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	2019/03/20 10:01

		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	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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.)				
S2262	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 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
S2263	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 H04S2420/01 OR H04S2420/13 OR H04S5/02 OR H04S7/00 OR H04S7/305	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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.)				
S2264	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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.)				
S2266	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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.)				
S2267	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2268	5050	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2269	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2270	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01

		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	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 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	2019/03/20 10:01

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:01
S2273	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 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	2019/03/20 10:01

		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.)				
S2274	459201	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	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	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	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	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04

		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	6076	(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	2360	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	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 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	2019/03/20 10:04

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/03/20 10:04
S2287	5855	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	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	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	US-	OR	ON	2019/03/20

		adjust$6.ab,clm.	PGPUB; USPAT			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	1168	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	70874	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2019/05/24 14:38
S2303	39758	"2203"	US-PGPUB; USPAT	OR	ON	2019/05/24 14:38
S2309	2834	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/05/24 15:20
S2310	2834	S2309	US-PGPUB; USPAT	OR	ON	2019/05/24 15:20
S2311	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	2019/05/24 15:21
S2312	76717	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-	OR	ON	2019/05/24

			PGPUB; USPAT			15:21
S2315	1996633	(output pair$5 channel surround$4) with (zone scene snapshot config$8)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2316	1996633	S2315	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2317	815239	(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	218212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2319	26224	S2317 and S2318	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2320	26224	S2319	US-PGPUB; USPAT	OR	ON	2019/05/24 15:21
S2321	815239	(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	218212	(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	1983	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	1983	S2325	US-PGPUB; USPAT	OR	ON	2019/05/24 15:25
S2327	22994	(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	22994	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	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	2019/05/24 15:28
S2332	55310	S2331	US-PGPUB;	OR	ON	2019/05/24 15:28

			USPAT			
S2333	94800	(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	94800	S2333	US-PGPUB; USPAT	OR	ON	2019/05/24 15:28
S2335	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	2019/05/24 15:45
S2336	98391	S2335	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2337	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	2019/05/24 15:45
S2338	125119	S2337	US-PGPUB; USPAT	OR	ON	2019/05/24 15:45
S2339	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	2019/05/24 15:45
S2340	125102	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	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	2019/05/24 15:47
S2344	33559	S2343	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2345	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	2019/05/24 15:47
S2346	2451	S2345	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47

S2347	2789	(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	2789	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	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	2019/05/24 15:47
S2354	55310	S2353	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2355	139176	power near4 (optimiz$6 estimat$6)	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2356	139176	S2355	US-PGPUB; USPAT	OR	ON	2019/05/24 15:47
S2357	55310	S2353	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2358	139176	S2355	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2359	37640	(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	37640	S2359	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59
S2361	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	US-PGPUB; USPAT	OR	ON	2019/05/24 15:59

		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.)				
S2362	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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00

		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.)				
S2363	158664	S2362	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00
S2364	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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00

		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.)				
S2365	155701	S2364	US-PGPUB; USPAT	OR	ON	2019/05/24 16:00
S2366	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 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 16:04
S2367	155701	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	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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		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.)				
S2370	158664	S2369	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2371	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 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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		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	296203	S2371	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2373	158664	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR	US-PGPUB;	OR	ON	2019/05/24 16:04

		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	USPAT					

		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	158664	S2373	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04
S2375	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 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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:04

		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	296203	S2375	US-PGPUB;	OR	ON	2019/05/24 16:04

			USPAT			
S2377	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2378	9224	S2377	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2379	5111	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2380	5111	S2379	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2381	62969	"381".clas. 704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:13
S2382	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2383	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 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	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 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	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14

		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	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2386	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 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	2019/05/24 16:14

		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	465927	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	465927	S2387	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2389	59458	("381".clas. 700/94.ccls.)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2390	3191	(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	3191	S2390	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2392	37671	S2387 and S2389	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2393	37671	S2392	US-PGPUB; USPAT	OR	ON	2019/05/24 16:14
S2394	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	2019/05/24 16:17
S2395	321605	S2394	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2396	62969	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2397	41182	S2387 and S2396	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2398	41182	S2397	US-PGPUB; USPAT	OR	ON	2019/05/24 16:17
S2399	64301	704/226,500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2400	64301	S2399	US-PGPUB; USPAT	OR	ON	2019/05/24 16:18
S2401	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 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	US-	OR	ON	2019/05/24

		adjust$6.ab,clm.	PGPUB; USPAT			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	86839	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	7166	S2401 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2410	7166	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	2532	S2409 and (sync synchron$9)	US-PGPUB; USPAT	OR	ON	2019/05/24 16:21
S2414	2532	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	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	2019/05/24 16:31
S2420	7324	S2419 and volume near3 adjust$6	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2421	7324	S2420	US-PGPUB;	OR	ON	2019/05/24 16:31

			USPAT			
S2422	1000	S2419 and volume near3 adjust$6.ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2423	1000	S2422	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2424	815239	(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	218212	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2426	26224	S2424 and S2425	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2427	26224	S2426	US-PGPUB; USPAT	OR	ON	2019/05/24 16:31
S2428	17650	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	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	2019/05/24 16:40
S2434	1996633	(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	17559	"177" and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:41
S2436	815392	45and S2424	US-PGPUB; USPAT	OR	ON	2019/05/24 16:42
S2437	19206	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-	OR	ON	2019/05/24

			PGPUB; USPAT			16:43
S2440	1983	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	302338	(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	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	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	3016	"s2305"	US-	OR	ON	2019/06/06

			PGPUB; USPAT			18:00
S2455	71174	(digital wireless network$6) near3 (playback adj device $6speaker transducer)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:00
S2456	71174	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	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 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	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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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.)				
S2461	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 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	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		H04R2499/11 OR H04R3/04).CPC.)				
S2463	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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	159102	((G10L19/008 OR G10L19/167 OR G10L19/24 OR G10L19/02 OR	US-PGPUB;	OR	ON	2019/06/06 18:01

		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	USPAT					

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2468	5115	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB;	OR	ON	2019/06/06 18:01

			USPAT			
S2469	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2470	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 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
S2471	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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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.)				
S2472	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB;	OR	ON	2019/06/06 18:01

			USPAT			
S2473	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		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	467389	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	382391	S2474 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2476	18971	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2474	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2477	16835	S2475 and S2476	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01
S2478	320	S2477 and (surround multi$channel multipl$5 near2 channel "5.1" mpeg$4 aes$3) and wireless$4 and (stereo pair	US-PGPUB; USPAT	OR	ON	2019/06/06 18:01

		group$4).ab. and pair$4				
S2481	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2482	9224	S2481	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2483	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 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
S2484	5119	((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	13578	(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	1761	(S2483 S2485) and S2486	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2488	14957	S2487 "s87"	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2489	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	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48

		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.)				
S2490	6856	S2489 and ($6zone scene configu$8) and (speaker transducer loud$3speaker).ab.	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2491	6856	S2490	US-PGPUB; USPAT	OR	ON	2019/06/06 19:48
S2492	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 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	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	2019/06/06 19:48
S2494	2407	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	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	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	1049	S2495 S2497	US-PGPUB; USPAT	OR	ON	2019/06/06 19:57
S2499	32	S2495 and S2497	US-PGPUB;	OR	ON	2019/06/06 19:57

			USPAT			
S2500	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 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
S2501	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2502	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2503	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 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	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2505	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 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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2507	297684	((H04S7/30 OR H04S2400/11 OR H04S2420/01 OR H04S7/302 OR	US-PGPUB;	OR	ON	2019/06/06 20:02

		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 H04R1/1083 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	USPAT					

		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	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2509	5119	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2510	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2511	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2512	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 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 20:02

		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	9224	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2514	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	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02

		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.)				
S2515	467719	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	382706	S2515 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2517	18990	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2515	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2518	16854	S2516 and S2517	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2519	3057	S2518 and (surround multi$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	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	2019/06/06 20:02
S2521	90	S2519 and S2520	US-PGPUB; USPAT	OR	ON	2019/06/06 20:02
S2522	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	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	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	2019/06/06 20:21
S2527	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	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" | "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" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"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.				
S2535	261	("20140023196" | "20140037097" | "20140064501" | "20140075308" | "20140075311" | "20140079242" | "20140108929" | "20140112481" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"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" | "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" | "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.				
S2536	280	("7136934" | "7139981" | "7143141" | "7143939" | "7146260" | "7158488" | "7161939" | "7162315" | "7171010" | "7185090" | "7187947" | "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" | "7676142" | "7688306" | "7689304" | "7689305" | "7702279" | "7702403" | "7710941" | "7711774" | "7720096" | "7721032" | "7742740" | "7742832" | "7743009" | "7746906" | "7761176" | "7765315" | "7792311" | "7793206" | "7804972" | "7805210" | "7817960" | "7827259" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"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").PN.				
S2537	94	("9524098" | "D260764" | "D279779" | "D293671" | "D301037" | "D304443" | "D313023" | "D313398" | "D313600" | "D320598" | "D322609" | "D326450" | "D327060" | "D331388" | "D333135" | "D350531" | "D350962" | "D354059" | "D354751" | "D356093" | "D356312" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"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.				
S2538	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" | "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" |	US-PGPUB; USPAT	OR	ON	2019/06/07 08:32

		"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" | "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.				
S2539	76016	(700/94.ccls. 715/716.ccls. "381".clas.) ((G06F3/165 OR H03G3/20 OR H03G3/3005 OR H03G5/165 OR	US-PGPUB; USPAT	OR	ON	2019/06/07 08:33

		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.)				
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	2056	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	8825	second near3 play$5 near4 (media song title)	US-PGPUB; USPAT	OR	ON	2019/08/30 16:56
S2564	1489	(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	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	2019/08/30 16:56
S2566	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 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	2019/08/30 16:57

		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.)				
S2567	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 16:57
S2568	5861	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	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 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	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	2019/08/30 17:00
S2575	2462	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	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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01

		H04L12/40117 OR H04L29/06 OR H04L29/06027 OR H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)				
S2578	5219	((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	14184	(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	1846	(S2577 S2579) and S2580	US-PGPUB; USPAT	OR	ON	2019/08/30 17:01
S2582	1156	(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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		G06F1/266 OR G06F3/162 OR H03G3/32 OR H03M7/30 OR H04H60/04).CPC.)				
S2585	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	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 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	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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	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 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	2019/08/30 17:06

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2593	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2594	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2595	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 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	2019/08/30 17:06
S2596	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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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.)				
S2597	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2598	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06

		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	461851	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	377992	S2599 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2601	19068	(digital wireless network$6) near3	US-	OR	ON	2019/08/30

		(playback adj device $6speaker transducer) and S2599	PGPUB; USPAT			17:06
S2602	16949	S2600 and S2601	US-PGPUB; USPAT	OR	ON	2019/08/30 17:06
S2603	3143	S2602 and (surround multi$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	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	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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	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 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	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	2019/08/30 17:13

		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	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 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	2019/08/30 17:13

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2616	5219	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2617	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2618	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 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	2019/08/30 17:13
S2619	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	2019/08/30 17:13

		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.)				
S2620	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2621	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 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	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

		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	461851	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	377992	S2622 and (zone scene config$8 snap$shot$4)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13

S2624	19068	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2622	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2625	16949	S2623 and S2624	US-PGPUB; USPAT	OR	ON	2019/08/30 17:13
S2626	331	S2625 and (surround multi$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	5219	((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	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 H04L65/604 OR H04R2227/003 OR H04R2420/07 OR H04R2499/11 OR H04R3/04).CPC.)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:16
S2630	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	2019/08/30 17:16
S2631	2462	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	5219	((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	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	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	2056	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	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	2019/08/30 17:22
S2643	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 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	2019/08/30 17:24

		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.)				
S2644	9226	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2645	5861	S2643 and S2644	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2646	2769	(output pair$5 channel surround$4 lfe) same config$8 and S2645	US-PGPUB; USPAT	OR	ON	2019/08/30 17:24
S2647	2769	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	840907	(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	222192	(speaker transducer loud$3speaker).ab,clm.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2652	3555	S2650 and S2651 and (eq equaliz$9)	US-PGPUB; USPAT	OR	ON	2019/08/30 17:27
S2653	1081	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	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	2019/08/30 17:34
S2661	1	"Term Removed" and lambourne	US-PGPUB; USPAT	OR	ON	2019/08/30 17:38
S2662	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	2019/08/30 17:38
S2663	10308	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" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

		"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"						
		"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" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

		"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" | "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.				
S2668	280	("7130616" | "7136934" | "7139981" |	US-	OR	ON	2019/08/30

		"7143141"	"7143939"	"7146260"	PGPUB; USPAT		17:43
		"7158488"	"7161939"	"7162315"			
		"7171010"	"7185090"	"7187947"			
		"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"			
		"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").PN.				
S2669	95	("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.	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43
S2670	200	("20010001160" | "20010009604" | "20010022823" | "20010027498" | "20010032188" | "20010042107" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

		"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"				
		"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" | "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.				
S2671	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" |	US-PGPUB; USPAT	OR	ON	2019/08/30 17:43

		"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"				
		"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.				
S2672	1036	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	1009	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	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 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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:14

		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	1375	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	1375	S2688	US-PGPUB; USPAT	OR	ON	2019/10/14 09:14
S2690	2104	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	2104	S2690	US-PGPUB; USPAT	OR	ON	2019/10/14 09:15
S2692	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	2019/10/14 09:18
S2693	2001	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	2966	active with audio with detect$6	US-PGPUB; USPAT	OR	ON	2019/10/14 09:22
S2696	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	2019/10/14 09:26

		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.)				
S2697	2489	second near3 play$5 near4 (media song title) and S2696	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2698	2489	S2697	US-PGPUB; USPAT	OR	ON	2019/10/14 09:26
S2699	2104	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	2104	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	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	2019/10/14 09:28
S2704	24444	S2703	US-PGPUB; USPAT	OR	ON	2019/10/14 09:28
S2705	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	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	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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:30

		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.)				
S2708	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	2019/10/14 09:30
S2709	2489	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	5245	((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	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 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.)				
S2715	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 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	2019/10/14 09:32

		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	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 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	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 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
S2718	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 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	2019/10/14 09:32

		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.)				
S2719	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 H04R29/00 OR H04R29/001 OR H04R1/02 OR	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		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.)				
S2722	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2723	5245	((G11B27/10 OR H03G3/10 OR H03G3/3026).CPC.)	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2724	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2725	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 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	2019/10/14 09:32

		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	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 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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32

		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	9229	704/500-502.ccls. 700/94.ccls.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2728	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 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.)				
S2729	466723	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	63006	704/500-502.ccls. 700/94.ccls. "381".clas.	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2731	41223	S2729 and S2730	US-PGPUB; USPAT	OR	ON	2019/10/14 09:32
S2732	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 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	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33

		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	8139	(digital wireless network$6) near3 (playback adj device $6speaker transducer) and S2732	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2734	26466	(zone scene config$9) with play$4 and S2732	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2735	2924	S2733 and S2734	US-PGPUB; USPAT	OR	ON	2019/10/14 09:33
S2736	2926	(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	2926	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	1375	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-	OR	ON	2019/10/14

			PGPUB; USPAT			09:40
S2741	2	"20160357504"	US-PGPUB; USPAT	OR	ON	2019/10/14 09:41

10/14/2019 9:58:24 AM
C:\Users\pmccord\Documents\EAST\Workspaces\kallai_sonos_stereo_config_viii.wsp

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	1	LOUDERBACK, Jim, "Affordable Audio Receiver Furnishes Homes With MP3," TechTV Vault. 28 June 2000 retrieved 10 July 2014, 2 pages.	
	2	MediaRenderer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	3	MediaServer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	4	Microsoft, Universal Plug and Play (UPnP) Client Support ("Microsoft UPnP") (August 2001) (D+M_0402007-24) (18 pages).	
	5	Microsoft Window's XP Reviewer's Guide (August 2001) (D+M_0402225-85) (61 pages).	
	6	"Microsoft Windows XP File and Printer Share with Microsoft Windows" Microsoft Windows XP Technical Article, 2003, 65 pages.	
	7	"Model MRC44 Four Zone - Four Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2002, 52 pages.	
	8	"SMPTE Made Simple: A Time Code Tutor by Timeline," 1996, 46 pages.	
	9	Network Time Protocol (NTP), RFC 1305 (Mar. 1992) (D+M_0397417-536) (120 pages).	
	10	"NexSys Software v.3 Manual," Crest Audio, Inc., 1997, 76 pages.	
	11	NIEDERST, JENNIFER "O'Reilly Web Design in a Nutshell," Second Edition, September 2001, 678 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/684927, filed 13 April 2015, 10 pages.	
	13	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/813961, filed 30 July 2015, 10 pages.	
	14	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2014, 16 pages.	
	15	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 13 pages.	
	16	Non-Final Office Action mailed on 11 September 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 11 pages.	
	17	Non-Final Office Action mailed on 24 April 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 11 pages.	
	18	Non-Final Office Action mailed on 25 September 2013, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	19	Notice of Allowance mailed on 01 October 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 14 pages.	
	20	Notice of Allowance mailed on 10 April 2015, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 16 pages.	
	21	Notice of Allowance mailed on 16 February 2017, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	
	22	Notice of Allowance mailed on 18 August 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	Notice of Allowance mailed on 22 March 2017, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 7 pages.	
	24	Notice of Allowance mailed on 27 August 2018, issued in connection with U.S. Patent Application No. 15/583553, filed on 1 May 2017, 7 pages.	
	25	Notice of Allowance mailed on 28 June 2017, issued in connection with U.S. Patent Application No. 14/813961, filed on 30 July 2015, 7 pages.	
	26	Notice of Allowance mailed on 28 September 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 10 pages.	
	27	Notice of Allowance mailed on 30 June 2017, issued in connection with U.S. Patent Application No. 14/684927, filed on 13 April 2015, 8 pages.	
	28	Notice of Allowance mailed on 5 November 2018, issued in connection with U.S. Patent Application No. 15/688204, filed on 28 August 2017, 7 pages.	
	29	Notice of Incomplete Re-Exam Request mailed on 25 May 2017, issued in connection with U.S. Patent Application No. 90/013959 , filed on 01 April 2016, 10 pages.	
	30	Office Action in Ex Parte Reexamination mailed on 20 October 2017, issued in connection with U.S. Patent Reexamination Application No. 90/013959, filed on 16 June 2017, 50 pages.	
	31	Palm, Inc., "Handbook for the Palm VII Handheld," May 2000, 311 pages.	
	32	Parasound Zpre2 Zone Preamplifier with PTZI Remote Control, 2005, 16 pages.	
	33	PILLAI et al., "A Method to Improve the Robustness of MPEG Video Applications over Wireless Networks," Kent Ridge Digital Labs, 2000, 15 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Presentations at WinHEC 2000, May 2000, 138 pages.	
	35	Proficient Audio Systems M6 Quick Start Guide, 2011, 5 pages.	
	36	Proficient Audio Systems: Proficient Editor Advanced Programming Guide, 2007, 40 pages.	
	37	Programming Interface for WL54040 Dual-Band Wireless Transceiver, AVAGO0066, Agere Systems, May 2004, 16 pages.	
	38	Radio Shack, "Auto-Sensing 4-Way Audio/Video Selector Switch," 2004, 1 page.	
	39	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 1, 100 pages.	
	40	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 2, 100 pages.	
	41	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 3, 100 pages.	
	42	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 4, 100 pages.	
	43	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 5, 46 pages.	
	44	RANGAN et al., "Feedback Techniques for Continuity and Synchronization in Multimedia Information Retrieval," ACM Transactions on Information Systems, 1995, pp. 145-176, Vol. 13, No. 2.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Real Time Control Protocol (RTCP) and Realtime Transfer Protocol (RTP), RFC 1889 (Jan. 1996) (D+M_0397810-84) (75 pages).	
	46	Realtime Streaming Protocol (RTSP), RFC 2326 (Apr. 1998) (D+M_0397945-8036) (92 pages).	
	47	Realtime Transport Protocol (RTP), RFC 3550 (July 2003) (D+M_0398235-323) (89 pages).	
	48	REID, Mark, "Multimedia conferencing over ISDN and IP networks using ITU-T H-series recommendations: architecture, control and coordination," Computer Networks, 1999, pp. 225-235, Vol. 31.	
	49	RenderingControl:1 Service Template Version 1.01 For UPnP, Version 1.0, (June 25, 2002) (SONDM000115187-249) (63 pages).	
	50	Renewed Request for Ex Parte Re-Examination, U.S. Application No. 90/013959 filed 16 June 2017, 126 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/ 10/11/2019	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.

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	1	"Residential Distributed Audio Wiring Practices," Leviton Network Solutions, 2001, 13 pages.	
	2	"Response to the Written Opinion of the International Searching Authority," issued in connection with European Patent Application No. 12717999.2, dated June 30, 2014, 9 pages.	
	3	ROLAND CORPORATION, "Roland announces BA-55 Portable PA System," press release, April 6, 2011, 2 pages.	
	4	ROTHERMEL et al., "An Adaptive Protocol for Synchronizing Media Streams," Institute of Parallel and Distributed High-Performance Systems (IPVR), 1997, 26 pages.	
	5	ROTHERMEL et al., "An Adaptive Stream Synchronization Protocol," 5th International Workshop on Network and Operating System Support for Digital Audio and Video, April 18-21, 1995, 12 pages.	
	6	ROTHERMEL et al., "Clock Hierarchies- An Abstraction for Grouping and Controlling Media Streams," University of Stuttgart Institute of Parallel and Distributed High-Performance Systems, January 1996, 23 pages.	
	7	ROTHERMEL et al., "Synchronization in Joint-Viewing Environments," University of Stuttgart Institute of Parallel and Distributed High-Performance Systems, 1992, 13 pages.	
	8	ROTHERMEL, Kurt, "State-of-the-Art and Future Research in Stream Synchronization," University of Stuttgart, 3 pages.	
	9	"RVL-6 Modular Multi-Room Controller, Installation & Operation Guide," Nile Audio Corporations, 1999, 46 pages.	
	10	Simple Network Time Protocol (SNTPI), RFC 1361 (August 1992) (D+M_0397537-46) (10 pages).	
	11	Simple Network Time Protocol (SNTPII), RFC 1769 (March 1995) (D+M_0397663-76) (14 pages).	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	Simple Service Discovery Protocol/1.0 Operating without an Arbiter (Oct. 28, 1999) (24 pages).	
	13	Sonos, Inc. v D&M Holdings, D&M Supp Opposition Brief including Exhibits, 17 March 2017, 23 pages.	
	14	Sonos, Inc. v. D&M Holdings, Expert Report of Jay P. Kesan including Appendices A-P, Feb. 20, 2017, 776 pages.	
	15	Sonos, Inc. v. D&M Holdings Inc. et al., Complaint for Patent Infringement, filed October 21, 2014, 20 pages.	
	16	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions, filed September 14, 2016, 100 pages.	
	17	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions, filed April 15, 2016, 97 pages.	
	18	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Preliminary Identification of Indefinite Terms, provided July 29, 2016, 8 pages.	
	19	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' 35 U.S.C. § 282 Notice filed November 2, 2017, 31 pages.	
	20	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Amended Answer, Defenses, and Counterclaims for Patent Infringement, filed November 30, 2015, 47 pages.	
	21	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Answer to Plaintiff's Second Amended Complaint, filed April 30, 2015, 19 pages.	
	22	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, filed September 7, 2016, 23 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	23	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Notice of Third-Party Subpoena to Core Brands, LLC, March 18, 2016, 100 pages.	
	24	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Notice of Third-Party Subpoena to Parasound Products, Inc., March 18, 2016, 67 pages.	
	25	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Reply in Support of Partial Motion for Judgment on the Pleadings, filed June 10, 2016, 15 pages.	
	26	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, provided August 1, 2016, 26 pages.	
	27	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, filed September 9, 2016, 43 pages.	
	28	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided September 9, 2016, 88 pages.	
	29	Sonos, Inc. v. D&M Holdings Inc. et al., First Amended Complaint for Patent Infringement, filed December 17, 2014, 26 pages.	
	30	Sonos, Inc. v. D&M Holdings Inc. et al., Joint Claim Construction Chart, Volume 1 of 3 with Exhibits A-O, filed August 17, 2016, 30 pages.	
	31	Sonos, Inc. v. D&M Holdings Inc. et al., Opening Brief in Support of Defendants' Partial Motion for Judgment on the Pleadings for Lack of Patent-Eligible Subject Matter, filed May 6, 2016, 27 pages.	
	32	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff Sonos, Inc.'s Opening Claim Construction Brief, filed September 9, 2016, 26 pages.	
	33	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff Sonos, Inc.'s Response in Opposition to Defendants' Partial Motion for Judgment on the Pleadings, filed May 27, 2016, 24 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	34	Sonos, Inc. v. D&M Holdings Inc. et al., Reply Brief in Support of Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided November 10, 2016, 16 pages.	
	35	Sonos, Inc. v. D&M Holdings Inc. et al., Reply Brief in Support of Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided September 9, 2016, 16 pages.	
	36	Sonos, Inc. v. D&M Holdings Inc. et al., Second Amended Complaint for Patent Infringement, filed February 27, 2015, 49 pages.	
	37	Sonos, Inc. v. D&M Holdings Inc. et al., Sonos's Motion to Strike Defendants' New Amended Answer Submitted with their Reply Brief, provided September 15, 2016, 10 pages.	
	38	Sonos, Inc. v. D&M Holdings Inc. et al., Sonos's Opposition to Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided October 31, 2016, 26 pages.	
	39	Sonos, Inc. v. D&M Holdings Inc. et al., Third Amended Complaint for Patent Infringement, filed January 29, 2016, 47 pages.	
	40	Sonos, Inc. v. D&M Holdings, Inc. (No. 14-1330-RGA), Defendants' Final Invalidity Contentions (Jan. 18, 2017) (106 pages).	
	41	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 226, Opinion Denying Inequitable Conduct Defenses, Feb. 6, 2017, updated, 5 pages.	
	42	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 242, US District Judge Andrews 101 Opinion, Mar. 13, 2017, 16 pages.	
	43	Sonos, Inc. v D&M Holdings, Sonos Supp Opening Markman Brief including Exhibits, 3 March 2017, 17 pages.	
	44	Sonos, Inc. v. D&M Holdings, Sonos Supp Reply Markman Brief including Exhibits, 29 March 2017, 36 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Sonos, Inc. v. D&M Holdings Inc. et al., Declaration of Steven C. Visser, executed September 9, 2016, 40 pages.
	46	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 1: Defendants' Invalidity Contentions for U.S. Patent No. 7,571,014 filed September 16, 2016, 270 pages.
	47	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 10: Defendants' Invalidity Contentions for U.S. Patent No. 9,219,959 filed September 27, 2016, 236 pages.
	48	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 11: Defendants' Invalidity Contentions for U.S. Design Patent No. D559,197 filed September 27, 2016, 52 pages.
	49	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 2: Defendants' Invalidity Contentions for U.S. Patent No. 8,588,949 filed September 27, 2016, 224 pages.
	50	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 3: Defendants' Invalidity Contentions for U.S. Patent No. 8,843,224 filed September 27, 2016, 147 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/ 10/11/2019	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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58644

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	1	Understanding Universal Plug and Play, Microsoft White Paper (June 2000) (D+M_0402074-118) (45 pages).	
	2	UNITED STATES PATENT AND TRADEMARK OFFICE, U.S. Provisional Application No. 60/490,768 filed on 28 July 2003, entitled "Method for synchronizing audio playback between multiple networked devices," 13 pages.	
	3	UNITED STATES PATENT AND TRADEMARK OFFICE, U.S. Provisional Application No. 60/825,407 filed on 12 September 2006, entitled "Controlling and manipulating groupings in a multi-zone music or media system," 82 pages.	
	4	Universal Plug and Play Device Architecture V. 1.0, (June 8, 2000) (54 pages).	
	5	Universal Plug and Play in Windows XP, Tom Fout. Microsoft Corporation (July 2001) (D+M_0402041-73) (33 pages).	
	6	Universal Plug and Play ("UPnP") AV Architecture:1 For UPnP, Version 1.0, (June 25, 2002) (D+M_0298151-72) (22 pages).	
	7	Universal Plug and Play Vendor's Implementation Guide (January 5, 2000) (7 pages).	
	8	UPnP AV Architecture:0.83 (June 12, 2002) (SONDM000115483-504) (22 pages).	
	9	UPnP Design by Example, A Software Developers Guide to Universal Plug and Play Michael Jeronimo and JackWeast, Intel Press (D+M_0401307-818) (April 2003) (511 pages).	
	10	UPnP; "Universal Plug and Play Device Architecture," 08 June 2000; version 1.0; Microsoft Corporation; pp 1-54.	
	11	WANCommonInterfaceConfig:1 Service Template Version 1.01 For UPnP, Ver. 1.0 (November 12, 2001) (D+M_0401820-43) (24 pages).	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

	12	WANIPConnection:1 Service Template Version 1.01 For UPnP Ver. 1.0 (November 12, 2001) (D+M_0401844-917) (74 pages).	
	13	WANPPPConnection:1 Service Template Version 1.01 For UPnP, Version 1.0 (November 12, 2001) (D +M_0401918-2006) (89 pages).	
	14	WaveLan High-Speed Multimode Chip Set, AVAGO0003, Agere Systems, February 2003, 4 pages.	
	15	WaveLan High-Speed Multimode Chip Set, AVAGO0005, Agere Systems, February 2003, 4 pages.	
	16	WaveLAN Wireless Integration Developer Kit (WI-DK) for Access Point Developers, AVAGO0054, Agere Systems, July 2003, 2 pages.	
	17	WaveLAN Wireless Integration-Developer Kit (WI-DK) Hardware Control Function (HCF), AVAGO0052, Agere Systems, July 2003, 2 pages.	
	18	WI-DK Release 2 WaveLan Embedded Drivers for VxWorks and Linux, AVAGO0056, Agere Systems, July 2003, 2 pages.	
	19	WI-DK Release 2 WaveLan END Reference Driver for VxWorks, AVAGO0044, Agere Systems, July 2003, 4 pages.	
	20	WI-DK Release 2 WaveLan LKM Reference Drivers for Linux, AVAGO0048, Agere Systems, July 2003, 4 pages.	
	21	Windows Media Connect Device Compatibility Specification (April 12, 2004) (16 pages).	
	22	WPA Reauthentication Rates, AVAGO0063, Agere Systems, February 2004, 3 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	23	Yamaha DME 64 Owner's Manual; copyright 2004, 80 pages.	
	24	Yamaha DME Designer 3.5 setup manual guide; copyright 2004, 16 pages.	
	25	Yamaha DME Designer 3.5 User Manual; Copyright 2004, 507 pages.	
	26	"Symantec pcAnywhere User's Guide," v 10.5.1, 1995-2002, 154 pages.	
	27	"Systemline Modular Installation Guide, Multiroom System," Systemline, 2003, pp. 1-22.	
	28	"ZR-8630AV MultiZone Audio/Video Receiver, Installation and Operation Guide," Niles Audio Corporation, 2003, 86 pages.	
	29	ZX135: Installation Manual,LA Audio, April 2003, 44 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/ 10/11/2019	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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	8275307		2012-09-25	DOYLE; Marquis D. et al.	
	2	8290185		2012-10-16	KIM; Jong-Bae	
	3	8306235		2012-11-06	MAHOWALD; Peter H.	
	4	8311226		2012-11-13	LORGEOUX; Mickael et al.	
	5	8325935		2012-12-04	RUTSCHMAN; Phillip	
	6	8331585		2012-12-11	HAGEN; Roar et al.	
	7	8345891		2013-01-01	JAKES; Philip John et al.	
	8	8374595		2013-02-12	CHIEN; Chih-Ling et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	9	8391501		2013-03-05	KHAWAND; Charbel et al.	
	10	8411883		2013-04-02	MATSUMOTO; Keishi	
	11	8423893		2013-04-16	RAMSAY; Max Gordon et al.	
	12	8442239		2013-05-14	BRUELLE-DREWS CHRISTIAN . et al.	
	13	8452020		2013-05-28	GREGG; Justin et al.	
	14	8472633		2013-06-25	KRANTZ; Anton W. et al.	
	15	8477958		2013-07-02	MOELLER; Klaus R. et al.	
	16	8483853		2013-07-09	LAMBOURNE; Robert A [Us] et al.	
	17	8521316		2013-08-27	LOUBOUTIN; Sylvain Rene Yves	
	18	8565455		2013-10-22	WORRELL; Devon et al.	
	19	8577045		2013-11-05	GIBBS; Jonathan A.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	20	8600075		2013-12-03	LIM; Soo-Chan	
	21	8600084		2013-12-03	GARRETT; James E.	
	22	8620006		2013-12-31	BERARDI; William et al.	
	23	8639370		2014-01-28	TORRINI; Antonio et al.	
	24	8654995		2014-02-18	SILBER; Michael W. et al.	
	25	8855319		2014-10-07	LIU; Wei-Han et al.	
	26	8861739		2014-10-14	OJANPERA; Juha P.	
	27	8879761		2014-11-04	JOHNSON; Martin E. et al.	
	28	8914559		2014-12-16	KALAYJIAN; Nicholas et al.	
	29	8934647		2015-01-13	JOYCE; John et al.	
	30	8934655		2015-01-13	BREEN; John J. et al.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	31	8938312		2015-01-20	MILLINGTON; Nicholas et al.	
	32	8942252		2015-01-27	BALASSANIAN; Edward et al.	
	33	8942395		2015-01-27	LISSAMAN; Geoff et al.	
	34	8965546		2015-02-24	VISSER; Erik et al.	
	35	8977974		2015-03-10	KRAUT; Joel	
	36	8984442		2015-03-17	PIRNACK; Tracy et al.	
	37	9020153		2015-04-28	BRITT Jr.; Joe Freeman	
	38	9042556		2015-05-26	KALLAI; Christopher [Us] et al.	
	39	9195258		2015-11-24	MILLINGTON; Nicholas A.J.	

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

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	1	20010042107		2001-11-15	PALM; Stephen R.	
	2	20010043456		2001-11-22	ATKINSON; Lee	
	3	20010050991		2001-12-13	EVES; David A.	
	4	20020022453		2002-02-21	BALOG; Horia et al.	
	5	20020026442		2002-02-28	LIPSCOMB; Kenneth O. et al.	
	6	20020072816		2002-06-13	SHDEMA; Yoav [Il] et al.	
	7	20020072817		2002-06-13	CHAMPION; Mark	
	8	20020078293		2002-06-20	KOU; Sho et al.	
	9	20020098878		2002-07-25	MOONEY; Philip D. et al.	
	10	20020101357		2002-08-01	GHARAPETIAN; Ara H.	
	11	20020124097		2002-09-05	ISELY; Larson J [Us] et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	20020131761		2002-09-19	KAWASAKI; Kojiro et al.	
	13	20020137505		2002-09-26	EICHE; Steven A. et al.	
	14	20020150053		2002-10-17	GRAY; Donald M. et al.	
	15	20020165921		2002-11-07	SAPIEYEVSKI; Jerzy	
	16	20020188762		2002-12-12	TOMASSETTI; Stephen Robert et al.	
	17	20030014486		2003-01-16	MAY; Gregory J.	
	18	20030023329		2003-01-30	BROOKS; Robert et al.	
	19	20030043856		2003-03-06	LAKANIEMI; Ari et al.	
	20	20030063755		2003-04-03	NOURSE; James D. et al.	
	21	20030073432		2003-04-17	MEADE; William K.	
	22	20030103088		2003-06-05	DRESTI; Mauro et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	23	20030157951		2003-08-21	HASTY; William V.	
	24	20030167335		2003-09-04	ALEXANDER; Bruce	
	25	20030179780		2003-09-25	WALKER; Anthony et al.	
	26	20030185400		2003-10-02	YOSHIZAWA; Kazuhiko et al.	
	27	20030198257		2003-10-23	SULLIVAN; Gary E. et al.	
	28	20030212802		2003-11-13	RECTOR; Dusty D. et al.	
	29	20030219007		2003-11-27	BARRACK; Craig et al.	
	30	20030231208		2003-12-18	HANON; Kris et al.	
	31	20040001591		2004-01-01	MANI; Murali et al.	
	32	20040014426		2004-01-22	MOORE; Richard A.	
	33	20040015252		2004-01-22	AISO; Masaru et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	34	20040019807		2004-01-29	FREUND; Gregor P. et al.	
	35	20040023697		2004-02-05	KOMURA; Tatsumi	
	36	20040024478		2004-02-05	HANS; Mathieu Claude et al.	
	37	20040031853		2004-02-19	PENG; Jack Zezhong	
	38	20040037433		2004-02-26	CHEN; Heng-Chien	
	39	20040042629		2004-03-04	MELLONE; Charles M. et al.	
	40	20040059842		2004-03-25	HANSON; Mark L. et al.	
	41	20040081099		2004-04-29	PATTERSON; Stuart et al.	
	42	20040117462		2004-06-17	BODIN; William Kress et al.	
	43	20040136554		2004-07-15	KIRKEBY; Ole	
	44	20040168081		2004-08-26	LADAS; Corey M. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	45	20040171346		2004-09-02	LIN; John	
	46	20040177167		2004-09-09	IWAMURA; Ryuichi et al.	
	47	20040183827		2004-09-23	PUTTERMAN; Daniel et al.	
	48	20040185773		2004-09-23	GERBER; Louis et al.	
	49	20040203590		2004-10-14	SHTEYN; Eugene	
	50	20040223622		2004-11-11	LINDEMANN; Eric Lee [Us] et al.	
	51	20040237750		2004-12-02	SMITH; Margaret Paige et al.	
	52	20040239816		2004-12-02	ANDO; Morio	
	53	20040249490		2004-12-09	SAKAI; Kenji	
	54	20040252400		2004-12-16	BLANK; William Thomas et al.	
	55	20040253969		2004-12-16	NGUYEN; Vu X. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	56	20050060435		2005-03-17	XUE; Xin et al.	
	57	20050100174		2005-05-12	HOWARD; Damian et al.	
	58	20050131558		2005-06-16	BRAITHWAITE; Michael et al.	
	59	20050154766		2005-07-14	HUANG; Wei-Hung et al.	
	60	20050160270		2005-07-21	GOLDBERG; David et al.	
	61	20050197725		2005-09-08	ALEXANDER; Jim et al.	
	62	20050201549		2005-09-15	DEDIEU; Stephane et al.	
	63	20050281138		2005-12-22	SHIMOZAWA; Dai [Jp] et al.	
	64	20060029005		2006-02-09	SLEMMER; John B. et al.	
	65	20060072489		2006-04-06	TOYOSHIMA; Akihiko	
	66	20060089735		2006-04-27	ATKINSON; Lee W.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	67	20060173844		2006-08-03	ZHANG; Junbiao et al.	
	68	20060173972		2006-08-03	JUNG; Edward K. et al.	
	69	20060205349		2006-09-14	PASSIER; Chris et al.	
	70	20060222186		2006-10-05	PAIGE; Robert F. et al.	
	71	20060227985		2006-10-12	KAWANAMI; Kenichiro	
	72	20060229752		2006-10-12	CHUNG; Chul	
	73	20060259649		2006-11-16	HSIEH; Kuan-Hong et al.	
	74	20060270395		2006-11-30	DHAWAN; Anil K [Us] et al.	
	75	20070003067		2007-01-04	GIERL; Stefan et al.	
	76	20070005160		2007-01-04	ZAUCHA; David E. et al.	
	77	20070087686		2007-04-19	HOLM; Jukka [Fi] et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	78	20070142944		2007-06-21	GOLDBERG; David et al.	
	79	20070265031		2007-11-15	KOIZUMI; Michiaki et al.	
	80	20070291961		2007-12-20	SHIN; Min-Chul	
	81	20080075295		2008-03-27	MAYMAN; Avrum G. et al.	
	82	20080077261		2008-03-27	BAUDINO; Daniel A [Us] et al.	
	83	20080092204		2008-04-17	BRYCE; Stuart et al.	
	84	20080144864		2008-06-19	HUON; Graeme John	
	85	20080146289		2008-06-19	KORNELUK; Jose E [Us] et al.	
	86	20080152165		2008-06-26	ZACCHI; Luca	
	87	20080205070		2008-08-28	OSADA; Yasuo	
	88	20080215169		2008-09-04	DEBETTENCOURT; Lisa et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	89	20080216125		2008-09-04	LI; Shipeng et al.	
	90	20080303947		2008-12-11	OHNISHI; Sunao et al.	
	91	20090011798		2009-01-08	YAMADA; Hiroshi	
	92	20090070434		2009-03-12	HIMMELSTEIN; Richard B.	
	93	20090124289		2009-05-14	NISHIDA; Osamu	
	94	20090251604		2009-10-08	IYER; Suraj C.	
	95	20100054709		2010-03-04	MISAWA; Junichiro et al.	
	96	20100087089		2010-04-08	STRUTHERS; Scott et al.	
	97	20100142735		2010-06-10	YOON; Eung-Sik [Kr] et al.	
	98	20100274372		2010-10-28	NIELSEN; Christen V. et al.	
	99	20110001632		2011-01-06	HOHORST; Andrew Gordon	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	100	20110002487		2011-01-06	PANTHER; Heiko et al.	
	101	20110170710		2011-07-14	SON; Beak-Kwon	
	102	20110228944		2011-09-22	CROGHAN; Frank et al.	
	103	20110316768		2011-12-29	MCRAE; Matthew Blake	
	104	20120051558		2012-03-01	KIM; Hae-Jong et al.	
	105	20120051567		2012-03-01	CASTOR-PERRY KENDALL.	
	106	20120127831		2012-05-24	GICKLHORN; Daniel P. et al.	
	107	20120148075		2012-06-14	GOH; Aik Hee Daniel [Sg] et al.	
	108	20120263325		2012-10-18	FREEMAN; Eric J. et al.	
	109	20120275624		2012-11-01	HO; Szuyu et al.	
	110	20120288126		2012-11-15	KARKKAINEN; Asta Maria et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	111	20130010970		2013-01-10	HEGARTY; Patrick James et al.	
	112	20130022221		2013-01-24	KALLAI; Christopher [Us] et al.	
	113	20130028443		2013-01-31	PANCE; Aleksandar et al.	
	114	20130129122		2013-05-23	JOHNSON; Martin E. et al.	
	115	20130259254		2013-10-03	XIANG; Pei et al.	
	116	20140016784		2014-01-16	SEN; Dipanjan et al.	
	117	20140016786		2014-01-16	SEN; Dipanjan	
	118	20140016802		2014-01-16	SEN; Dipanjan	
	119	20140023196		2014-01-23	XIANG; Pei et al.	
	120	20140112481		2014-04-24	LI; Minyue et al.	
	121	20140219456		2014-08-07	MORRELL; Martin James et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	122	20140226823		2014-08-14	SEN; Dipanjan et al.	
	123	20140256260		2014-09-11	UEDA; Joji et al.	
	124	20140294200		2014-10-02	BAUMGARTE; Frank et al.	
	125	20140355768		2014-12-04	SEN; Dipanjan et al.	
	126	20140355794		2014-12-04	MORRELL; Martin James et al.	
	127	20150063610		2015-03-05	MOSSNER; Peter	
	128	20150146886		2015-05-28	BAUMGARTE; Frank M.	
	129	20150201274		2015-07-16	ELLNER; Lars Henrik et al.	
	130	20150281866		2015-10-01	WILLIAMS; Chester Smith et al.	
	131	20150365987		2015-12-17	WEEL; Martin	

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

FOREIGN PATENT DOCUMENTS Remove

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	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]
	1	EUROPEAN PATENT OFFICE, Extended European Search Report mailed on 06 July 2016, issued in connection with European Application No. 16159936.0 - 1568, 8 pages.	
	2	EUROPEAN PATENT OFFICE, Extended European Search Report mailed on 30 June 2016, issued in connection with European Application No. 16157894.3 - 1568, 8 pages.	
	3	FALLER, Christof, "Coding of Spatial Audio Compatible with Different Playback Formats," Audio Engineering Society Convention Paper (Presented at the 117th Convention), October 28-31, 2004, 12 pages.	
	4	Final Office Action mailed on 10 April 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	5	Fireball DVD and Music Manager DVDM-100 Installation and User's Guide, Copyright 2003, 185 pages.	
	6	Fireball MP-200 User's Manual, Copyright 2006, 93 pages.	
	7	Fireball Remote Control Guide WD006-1-1, Copyright 2003, 19 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	8	Fireball SE-D1 User's Manual, Copyright 2005, 90 pages.	
	9	FOBER et al., "Clock Skew Compensation over a High Latency Network," Proceedings of the ICMC, 2002, pp. 548-552.	
	10	Fries et al. "The MP3 and Internet Audio Handbook: Your Guide to the Digital Music Revolution." 2000, 320 pages.	
	11	GASTON et al., "Methods for Sharing Stereo and Multichannel Recordings Among Planetariums," Audio Engineering Society Convention Paper 7474, 2008, 15 pages.	
	12	General Event Notification Architecture Base: Client to Arbiter (April 2000) (23 pages).	
	13	HERRE et al., "The Reference Model Architecture for MPEG Spatial Audio Coding," Audio Engineering Society Convention Paper (Presented at the 118th Convention), May 28-31, 2005, 13 pages.	
	14	Home Networking with Universal Plug and Play, IEEE Communications Magazine, Vol. 39 No. 12 (December 2001) (D+M_0402025-40) (16 pages).	
	15	"Home Theater Control Systems," Cinema Source, 2002, 19 pages.	
	16	HORWITZ, Jeremy, "Logic3 i-Station25," retrieved from the internet: http://www.ilounge.com/index.php/reviews/entry/logic3-i-station25/, last visited December 17, 2013, 5 pages.	
	17	IBM Home Director Installation and Service Manual, Copyright1998, 124 pages.	
	18	IBM Home Director Owner's Manual, Copyright 1999, 67 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	19	Implicit, LLC v. Sonos, Inc. (No. 14-1330-RGA), Defendant's Original Complaint (Mar. 3, 2017) (15 pages).	
	20	Integra Audio Network Receiver NAC 2.3 Instruction Manual, 68 pages.	
	21	Integra Audio Network Server NAS 2.3 Instruction Manual, pp. 1-32.	
	22	Integra Service Manual, Audio Network Receiver Model NAC-2.3, December 2002, 44 pages.	
	23	Intel Designing a UPnP AV Media Renderer, v. 1.0 ("Intel AV Media Renderer") (May 20, 2003) (SONDM000115117-62) (46 pages).	
	24	Intel Media Renderer Device Interface ("Intel Media Renderer") (September 6, 2002) (62 pages).	
	25	Intel SDK for UPnP Devices Programming Guide, Version 1.2.1, (November 2002) (30 pages).	
	26	INTERNATIONAL BUREAU, International Preliminary Report on Patentability mailed on 30 January 2014, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 6 pages.	
	27	INTERNATIONAL BUREAU, International Preliminary Report on Patentability, mailed on 31 October 2013, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 8 pages.	
	28	INTERNATIONAL SEARCHING AUTHORITY, International Search Report mailed on 13 August 2012, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 3 pages.	
	29	INTERNATIONAL SEARCHING AUTHORITY, International Search Report mailed on 26 December 2012, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 3 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	30	INTERNATIONAL SEARCHING AUTHORITY, Written Opinion mailed on 13 August 2012, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 7 pages.	
	31	INTERNATIONAL SEARCHING AUTHORITY, Written Opinion mailed on 26 December 2012, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 4 pages.	
	32	ISHIBASHI et al., "A Comparison of Media Synchronization Quality Among Reactive Control Schemes," IEEE Infocom, 2001, pp. 77-84.	
	33	Issues with Mixed IEEE 802.b/802.11g Networks, AVAGO0058, Agere Systems, February 2004, 5 pages.	
	34	JAPANESE PATENT OFFICE, Notice of Rejection mailed 7 March 2017, issued in connection with Japanese Application No. 2016-028196, 2 pages.	
	35	JAPANESE PATENT OFFICE, Notice of Rejection, mailed on 03 February 2015, issued in connection with Japanese Patent Application No. 2014-521648, 7 pages.	
	36	JAPANESE PATENT OFFICE, Office Action mailed on 28 October 2014, issued in connection with Japanese patent application No. 2014-506484, 5 pages.	
	37	JAPANESE PATENT OFFICE, Office Action mailed on 8 May 2018, issued in connection with Japanese Application No. 2017-111806, 8 pages.	
	38	JAPANESE PATENT OFFICE, Translation of Office Action mailed on 8 May 2018, issued in connection with Japanese Application No. 2017-111806, 4 pages.	
	39	JO et al., "Synchronized One-to-many Media Streaming with Adaptive Playout Control," Proceedings of SPIE, 2002, pp. 71-82, Vol. 4861.	
	40	JONES, Stephen, "Dell Digital Audio Receiver: Digital upgrade for your analog stereo," Analog Stereo, 24 June 2000 retrieved 18 June 2014, 2 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	41	Lake Processors: Lake® LM Series Digital Audio Processors Operation Manual, 2011, 71 pages.	
	42	LG: RJP-201M Remote Jack Pack Installation and Setup Guide, 2010, 24 pages.	
	43	LIENHART et al., "On the Importance of Exact Synchronization for Distributed Audio Signal Processing," Session L: Poster Session II - ICASSP'03 Papers, 2002, 1 page.	
	44	LinkSys by Cisco, Wireless Home Audio Controller, Wireless-N Touchscreen Remote DMRW1000 Datasheet, Copyright 2008, 2 pages.	
	45	LinkSys by Cisco, Wireless Home Audio Controller, Wireless-N Touchscreen Remote DMRW1000 User Guide, Copyright 2008, 64 pages.	
	46	LinkSys by Cisco, Wireless Home Audio Player, Wireless-N Music Extender DMP100 Quick Installation Guide, Copyright 2009, 32 pages.	
	47	LinkSys by Cisco, Wireless Home Audio Player, Wireless-N Music Extender DMP100 User Guide, Copyright 2008, 65 pages.	
	48	Linux SDK for UPnP Devices v. 1.2 (Sep. 6, 2002) (101 pages).	
	49	LIU et al., "A synchronization control scheme for real-time streaming multimedia applications," Packet Video, 2003, 10 pages, Vol. 2003.	
	50	LIU et al., "Adaptive Delay Concealment for Internet Voice Applications with Packet-Based Time-Scale Modification," Information Technologies 2000, pp. 91-102.	

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

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

EXAMINER SIGNATURE			
Examiner Signature	/PAUL C MCCORD/ 10/11/2019	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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	D260764	S	1981-09-15	CASTAGNA; John F. et al.	
	2	D279779	S	1985-07-23	TAYLOR; Terrance N.	
	3	D293671	S	1988-01-12	BEAUMONT; Thomas G.	
	4	D301037	S	1989-05-09	MATSUDA; Hari	
	5	D304443	S	1989-11-07	GRINYER; Clive A. et al.	
	6	D313023	S	1990-12-18	KOLENDA; David F. et al.	
	7	D313398	S	1991-01-01	GILCHRIST; Thomas L.	
	8	D313600	S	1991-01-08	WEBER; Edward W.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	9	D320598	S	1991-10-08	AUERBACH; Marc et al.	
	10	D322609	S	1991-12-24	PATTON; Douglas M.	
	11	D326450	S	1992-05-26	WATANABE; Katsuhito	
	12	D327060	S	1992-06-16	WACHOB; David E. et al.	
	13	D331388	S	1992-12-01	DAHNERT; Dean L. et al.	
	14	D333135	S	1993-02-09	WACHOB; David E. et al.	
	15	D350531	S	1994-09-13	TSUJI; Masao	
	16	D350962	S	1994-09-27	REARDON; John D. et al.	
	17	D354059	S	1995-01-03	HENDRICKS; John S.	
	18	D354751	S	1995-01-24	HERSH; Joseph B. et al.	
	19	D356093	S	1995-03-07	MCCAULEY; Gilbert L. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	20	D356312	S	1995-03-14	ALTHANS; Richard K.	
	21	D357024	S	1995-04-04	TOKIYAMA; Masaru et al.	
	22	D362446	S	1995-09-19	GASIOREK; John G. et al.	
	23	D363933	S	1995-11-07	STARCK; Philippe	
	24	D364877	S	1995-12-05	TOKIYAMA; Masaru et al.	
	25	D364878	S	1995-12-05	GREEN; Dewayne E. et al.	
	26	D365102	S	1995-12-12	GIOSCIA; Richard	
	27	D366044	S	1996-01-09	HARA; Masayuki et al.	
	28	D372716	S	1996-08-13	THORNE; Edwin	
	29	D377651	S	1997-01-28	BIASOTTI; Mark et al.	
	30	D379816	S	1997-06-10	LAITURI; David W. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	31	D380752	S	1997-07-08	HANSON; Bruce D.	
	32	D382271	S	1997-08-12	AKWIWU; Ndukwe	
	33	D384940	S	1997-10-14	KONO; Kenichiro et al.	
	34	D387352	S	1997-12-09	KANEKO; Steven T. et al.	
	35	D388792	S	1998-01-06	NYKERK; Michael	
	36	D389143	S	1998-01-13	WICKS; James E.	
	37	D392641	S	1998-03-24	FENNER; Knut T.	
	38	D393628	S	1998-04-21	LEDBETTER; Carl J. et al.	
	39	D394659	S	1998-05-26	BIASOTTI; Mark et al.	
	40	D395889	S	1998-07-07	GERBA; George et al.	
	41	D397996	S	1998-09-08	SMITH; Michael A.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	42	D401587	S	1998-11-24	RUDOLPH; Daniel L.	
	43	D404741	S	1999-01-26	SCHUMAKER; Nevenka et al.	
	44	D405071	S	1999-02-02	GAMBARO; Thomas L.	
	45	D406847	S	1999-03-16	GERBA; George et al.	
	46	D407071	S	1999-03-23	KEATING; Virginia Walker	
	47	D410927	S	1999-06-15	YAMAGISHI; Yoshinobu	
	48	D412337	S	1999-07-27	HAMANO; Masataka	
	49	D415496	S	1999-10-19	GERBA; George et al.	
	50	D416021	S	1999-11-02	GODETTE; Robert G. et al.	
	51	D420006	S	2000-02-01	TONINO; Eduardus Josephus Anna Maria	
	52	D429246	S	2000-08-08	HOLMA; Tapani	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	53	D430143	S	2000-08-29	RENK; Thomas Edward	
	54	D431552	S	2000-10-03	BACKS; Jochen Philipp et al.	
	55	D432525	S	2000-10-24	BEECROFT; Troy C.	
	56	D444475		2001-07-03	LEVEY; Keith P. et al.	
	57	D444475		2001-07-03	LEVEY; Keith P. et al.	
	58	D452520		2001-12-25	GOTHAM; David R. et al.	
	59	D462339		2002-09-03	ALLEN; Paul G. et al.	
	60	D462340		2002-09-03	ALLEN; Paul G. et al.	
	61	D462945		2002-09-17	SKULLEY; Gerald W.	
	62	D466108		2002-11-26	GLODAVA; Derrick A. et al.	
	63	D468297		2003-01-07	IKEDA; Tetsuya	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	64	D474763		2003-05-20	TOZAKI; Ray et al.	
	65	D475993		2003-06-17	MEYER; Robert K.	
	66	D476643		2003-07-01	YAMAGISHI; Masayuki	
	67	D477310		2003-07-15	MORANSAIS; Charles	
	68	D478051		2003-08-05	SAGAWA; So	
	69	D478069		2003-08-05	BECK; Benjamin et al.	
	70	D478896		2003-08-26	SUMMERS; Kim Renee	
	71	D479520		2003-09-09	DE; Saulles Stephen	
	72	D481056		2003-10-21	KAWASAKI; Mugio et al.	
	73	D486145		2004-02-03	KAMINSKI; Dariusz S. et al.	
	74	D491925		2004-06-22	GRIESAU; Gene W. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	75	D493148		2004-07-20	SHIBATA; Kumiko et al.	
	76	D495333		2004-08-31	BORSBOOM; Antonious M.	
	77	D496003		2004-09-14	SPIRA; Joel S.	
	78	D496005		2004-09-14	WANG; Carter	
	79	D496335		2004-09-21	SPIRA; Joel S.	
	80	D497363		2004-10-19	OLSON; Mark H. et al.	
	81	D499086		2004-11-30	POLITO; Fred	
	82	D499395		2004-12-07	HSU; Gary	
	83	D499718		2004-12-14	CHEN; Alex	
	84	D500015		2004-12-21	GUBBE; Bernd	
	85	D501477		2005-02-01	HALL; David	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	86	D504872		2005-05-10	UEHARA; Mitsuhiro et al.	
	87	D504885		2005-05-10	ZHANG; Jinsong et al.	
	88	D506463		2005-06-21	DANIELS; Wilfried Johan Paul Ferdinand	
	89	D515072		2006-02-14	LEE; Nikolas Ian	
	90	D515557		2006-02-21	OKULEY; James M.	
	91	D518475		2006-04-04	YANG; Yu-Ching et al.	
	92	D524296		2006-07-04	KITA; Toshiyuki	
	93	D527375		2006-08-29	FLORA; William T. et al.	
	94	3956591		1976-05-11	GATES Jr.; ,William A.	
	95	4105974		1978-08-08	ROGERS; Edwin F.	
	96	4306114		1981-12-15	CALLAHAN; Jeffery C.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	97	4509211		1985-04-02	ROBBINS; Michael S.	
	98	4530091		1985-07-16	CROCKETT; Gary B.	
	99	4696037		1987-09-22	FIERENS; Gustaaf E. M.	
	100	4701629		1987-10-20	CITROEN; Maxime H.	
	101	4712105		1987-12-08	KOEHLER; Hans E. P.	
	102	4731814		1988-03-15	BECKER; William R. et al.	
	103	4824059		1989-04-25	BUTLER; Les I.	
	104	4845751		1989-07-04	SCHWAB; Brian H.	
	105	4994908		1991-02-19	KUBAN; Curt M. et al.	
	106	4995778		1991-02-26	BRUESSEL; Richard	
	107	5086385		1992-02-04	LAUNEY; Reuel O. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	108	5151922		1992-09-29	WEISS; Karl R.	
	109	5182552		1993-01-26	PAYNTING; Richard J.	
	110	5237327		1993-08-17	SAITOH; Mitsumasa et al.	
	111	5272757		1993-12-21	SCOFIELD; William C. et al.	
	112	5361381		1994-11-01	SHORT; William R.	
	113	5372441		1994-12-13	LOUIS; William M.	
	114	5406634		1995-04-11	ANDERSON; Charles W [Us] et al.	
	115	5430485		1995-07-04	LANKFORD; Douglas E. et al.	
	116	5440644		1995-08-08	FARINELLI; Robert [Us] et al.	
	117	5457448		1995-10-10	TOTSUKA; Keiichi et al.	
	118	5481251		1996-01-02	BUYS; Menno et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	119	5515345		1996-05-07	BARREIRA; Jeane K. et al.	
	120	5553147		1996-09-03	PINEAU; Joseph E. M.	
	121	5553314		1996-09-03	GRUBE; Gary W. et al.	
	122	5625350		1997-04-29	FUKATSU; Hitoshi et al.	
	123	5640388		1997-06-17	WOODHEAD; Douglas F. et al.	
	124	5661665		1997-08-26	GLASS; Adam et al.	
	125	5740235		1998-04-14	LESTER; James William et al.	
	126	5742623		1998-04-21	NUBER; Ray et al.	
	127	5761320		1998-06-02	FARINELLI; Robert et al.	
	128	5774016		1998-06-30	KETTERER; Ernest R.	
	129	5790543		1998-08-04	CLOUTIER; Leo	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	130	5812201		1998-09-22	YOO; Ki Ryung	
	131	5818948		1998-10-06	GULICK; Dale E.	
	132	5832024		1998-11-03	SCHOTZ; Larry et al.	
	133	5848152		1998-12-08	SLIPY; Michael J. et al.	
	134	5852722		1998-12-22	HAMILTON; Graham	
	135	5875233		1999-02-23	COX; Daniel R.	
	136	5905768		1999-05-18	MATURI; Greg et al.	
	137	5910991		1999-06-08	FARRAR; Douglas M.	
	138	5923902		1999-07-13	INAGAKI; Yoshihiro	
	139	5946343		1999-08-31	SCHOTZ; Larry et al.	
	140	5956025		1999-09-21	GOULDEN; Lorna et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	141	5960006		1999-09-28	MATURI; Greg et al.	
	142	5984512		1999-11-16	JONES; Anthony Mark et al.	
	143	5987611		1999-11-16	FREUND; Gregor	
	144	5990884		1999-11-23	DOUMA; Peter et al.	
	145	5991307		1999-11-23	KOMURO; Teruyoshi et al.	
	146	5999906		1999-12-07	MERCS; Laura et al.	
	147	6018376		2000-01-25	NAKATANI; Shintarou	
	148	6029196		2000-02-22	LENZ; Michael A.	
	149	6032202		2000-02-29	LEA; Rodger J [Us] et al.	
	150	6038614		2000-03-14	CHAN; Rix S. et al.	
	151	6046550		2000-04-04	FERENCE; Jonathan H. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	152	6061457		2000-05-09	STOCKHAMER; Lee	
	153	6081266		2000-06-27	SCIAMMARELLA; Eduardo	
	154	6088063		2000-07-11	SHIBA; Kosuke	
	155	6101195		2000-08-08	LYONS; Paul Wallace et al.	
	156	6127941		2000-10-03	VAN RYZIN; John M.	
	157	6148205		2000-11-14	COTTON; Timothy R.	
	158	6169725		2001-01-02	GIBBS; Simon J. et al.	
	159	6181383		2001-01-30	FOX; Edward C. et al.	
	160	6195435		2001-02-27	KITAMURA; John S.	
	161	6212282		2001-04-03	MERSHON; Stuart	
	162	6246701		2001-06-12	SLATTERY; William	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	163	6256554		2001-07-03	DILORENZO; Mark	
	164	6269406		2001-07-31	DUTCHER; David Paul et al.	
	165	6301012		2001-10-09	WHITE; Craig R. et al.	
	166	6310652		2001-10-30	LI; Stephen et al.	
	167	6313879		2001-11-06	KUBO; Hiroaki et al.	
	168	6321252		2001-11-20	BHOLA; Sumeer et al.	
	169	6353172		2002-03-05	FAY; Todor C. et al.	
	170	6356871		2002-03-12	HEMKUMAR; Nariankadu Datatreya et al.	
	171	6404811		2002-06-11	CVETKO; John F. et al.	
	172	6418150		2002-07-09	STAATS; Erik P.	
	173	6442443		2002-08-27	FUJII; Kazuo et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	174	6449642		2002-09-10	BOURKE-DUNPHY ERIN MARIE . et al.	
	175	6456783		2002-09-24	ANDO; Hideo et al.	
	176	6463474		2002-10-08	FUH; Tzong-Fen et al.	
	177	6466832		2002-10-15	ZUQERT; Benjamin et al.	
	178	6469633		2002-10-22	WACHTER; Martin Richard [Us] et al.	
	179	6487296		2002-11-26	ALLEN; Steven W. et al.	
	180	6493832		2002-12-10	ITAKURA; Eisaburo et al.	
	181	6522886		2003-02-18	YOUNGS; Edward A. et al.	
	182	6535121		2003-03-18	MATHNEY; Richard K. et al.	
	183	6611537		2003-08-26	EDENS; Glenn T. et al.	
	184	6631410		2003-10-07	KOWALSKI; John Michael [Us] et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	185	6636269		2003-10-21	BALDWIN; James A.	
	186	6653899		2003-11-25	ORGANVIDEZ; Juan H. et al.	
	187	6654720		2003-11-25	GRAHAM; Stephen Glen et al.	
	188	6654956		2003-11-25	TRINH; Vincent et al.	
	189	6684060		2004-01-27	CURTIN; Steven D.	
	190	6697687		2004-02-24	KASAHARA; Yasuhiro et al.	
	191	6704421		2004-03-09	KITAMURA; John S.	
	192	6741961		2004-05-25	LIM; Chae-Duck	
	193	6757517		2004-06-29	CHANG; Chin-Chi [Tw] et al.	
	194	6778073		2004-08-17	LUTTER; Robert Pierce et al.	
	195	6778869		2004-08-17	CHAMPION; Mark	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	196	6809635		2004-10-26	KAARESOJA; Topi	
	197	6816510		2004-11-09	BANERJEE; Subrata	
	198	6826283		2004-11-30	WHEELER; Thomas M. et al.	
	199	6859460		2005-02-22	CHEN; Michael C.	
	200	6859538		2005-02-22	VOLTZ; Christopher	
	201	6873862		2005-03-29	RESHEFSKY; Marc Alan	
	202	6882335		2005-04-19	SAARINEN; Pertti	
	203	6901439		2005-05-31	BONASIA; Gaetano et al.	
	204	6915347		2005-07-05	HANKO; James G. et al.	
	205	6919771		2005-07-19	NAKAJIMA; Kouji	
	206	6931557		2005-08-16	TOGAWA; Yoshifusa	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	207	6937988		2005-08-30	HEMKUMAR; Nariankadu Datatreya et al.	
	208	6987767		2006-01-17	SAITO; Tatsunori	
	209	6999827		2006-02-14	YONG; Yan Kang	
	210	7046677		2006-05-16	MONTA; Peter et al.	
	211	7072477		2006-07-04	KINCAID; William S.	
	212	7092528		2006-08-15	PATRICK; Kyle N. et al.	
	213	7092694		2006-08-15	GRIEP; Pieter Dingenis et al.	
	214	7096169		2006-08-22	CRUTCHFIELD; William G. et al.	
	215	7120168		2006-10-10	ZIMMERMANN; Klaus	
	216	7130316		2006-10-31	KOVACEVIC; Branko D.	
	217	7130608		2006-10-31	HOLLSTROM; Magnus et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	218	7130616		2006-10-31	JANIK; Craig M.	
	219	7136934		2006-11-14	CARTER; Harry Nick et al.	
	220	7139981		2006-11-21	MAYER; Theodore et al.	
	221	7143939		2006-12-05	HENZERLING; David P.	
	222	7146260		2006-12-05	PRESTON; Dan Alan et al.	
	223	7161939		2007-01-09	ISRAEL; David et al.	
	224	7197148		2007-03-27	NOURSE; James D. et al.	
	225	7206618		2007-04-17	LATTO; Antonio T. et al.	
	226	7218708		2007-05-15	BEREZOWSKI; Andrew G. et al.	
	227	7236773		2007-06-26	THOMAS; Graham	
	228	7260616		2007-08-21	COOK; Fred S.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	229	7263110		2007-08-28	FUJISHIRO; Yoshiya	
	230	7277547		2007-10-02	DELKER; Jason R. et al.	
	231	7289631		2007-10-30	ISHIDOSHIRO; Takashi	
	232	7295548		2007-11-13	BLANK; William Thomas [Us] et al.	
	233	7302468		2007-11-27	WIJERATNE; Viranga L.	
	234	7305694		2007-12-04	COMMONS; Christopher et al.	
	235	7308188		2007-12-11	NAMATAME; Kazushi	
	236	7324857		2008-01-29	GODDARD; Mark D.	
	237	7356011		2008-04-08	WATERS; Christopher J. F. et al.	
	238	7366206		2008-04-29	LOCKRIDGE; Terry Wayne et al.	
	239	7391791		2008-06-24	BALASSANIAN; Edward et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	240	7428310		2008-09-23	PARK; Jeong-Hyun	
	241	7430181		2008-09-30	HONG; Jay Wu	
	242	7457948		2008-11-25	BILICKSA; Carl et al.	
	243	7472058		2008-12-30	TSENG; Wei-Hsin et al.	
	244	7483538		2009-01-27	MCCARTY; William A. et al.	
	245	7490044		2009-02-10	KULKARNI; Abhijit	
	246	7492912		2009-02-17	CHUNG; Yun M. et al.	
	247	7505889		2009-03-17	SALMONSEN; Daniel R. et al.	
	248	7519188		2009-04-14	BERARDI; William et al.	
	249	7539551		2009-05-26	KOMURA; Tatsumi [Jp] et al.	
	250	7548744		2009-06-16	OESTERLING; Christopher L. et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	251	7548851		2009-06-16	LAU; Jack et al.	
	252	7558224		2009-07-07	SURAZSKI; Luke K. et al.	
	253	7558635		2009-07-07	THIEL; Steffen et al.	
	254	7571014		2009-08-04	LAMBOURNE; Robert A [Us] et al.	
	255	7627825		2009-12-01	KAKUDA; Hiroshi	
	256	7630500		2009-12-08	BECKMAN; Paul E. et al.	
	257	7630501		2009-12-08	BLANK; William Tom [Us] et al.	
	258	7643894		2010-01-05	BRAITHWAITE; Michael et al.	
	259	7653344		2010-01-26	FELDMAN; Theodore Philip et al.	
	260	7657910		2010-02-02	MCAULAY; Roger [Us] et al.	
	261	7675943		2010-03-09	MOSIG; Rudiger et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	262	7676044		2010-03-09	SASAKI; Toru [Jp] et al.	
	263	7676142		2010-03-09	HUNG; Andy Chao	
	264	7688306		2010-03-30	WEHRENBERG; Paul J. et al.	
	265	7710941		2010-05-04	RIETSCHEL; Johannes et al.	
	266	7721032		2010-05-18	BUSHELL; John Samuel et al.	
	267	7728911		2010-06-01	LACY; Reed H. et al.	
	268	7746906		2010-06-29	JINZAKI; Akira et al.	
	269	7761176		2010-07-20	BEN-YAACOV YAACOV . et al.	
	270	7831054		2010-11-09	BALL; Steven J. et al.	
	271	7853341		2010-12-14	MCCARTY; William A. et al.	
	272	7882234		2011-02-01	WATANABE; Mitsuhiro et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	273	7908637		2011-03-15	KWON; Kwang H. et al.	
	274	7930644		2011-04-19	SILVA; Michael C. et al.	
	275	7933418		2011-04-26	MORISHIMA; Morito	
	276	7945636		2011-05-17	NELSON; Hortense Kathleen et al.	
	277	7945708		2011-05-17	OHKITA; Hideki	
	278	7966388		2011-06-21	PUGACZEWSKI; John T. et al.	
	279	7987294		2011-07-26	BRYCE; Stuart [Au] et al.	
	280	7995732		2011-08-09	KOCH; Robert et al.	
	281	8014423		2011-09-06	THALER; Thomas et al.	
	282	8041062		2011-10-18	COHEN; Ephram et al.	
	283	8045952		2011-10-25	QURESHEY; Safi et al.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	284	8050203		2011-11-01	JACOBSEN; Phillip et al.	
	285	8054987		2011-11-08	SEYDOUX; Henri	
	286	8055363		2011-11-08	LEE; Chang-Jin	
	287	8063698		2011-11-22	HOWARD; Damian	
	288	8103009		2012-01-24	MCCARTY; William A. et al.	
	289	8139774		2012-03-20	BERARDI; William et al.	
	290	8150079		2012-04-03	MAEDA; Kazuhiro et al.	
	291	8160281		2012-04-17	KIM; Young-Tae et al.	
	292	8170222		2012-05-01	DUNKO; Gregory A.	
	293	8175292		2012-05-08	AYLWARD; Jrichard [Us] et al.	
	294	8229125		2012-07-24	SHORT; William R.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	295	8233029		2012-07-31	YOSHIDA; Junji et al.	
	296	8233632		2012-07-31	MACDONALD; Andrew John et al.	
	297	8234395		2012-07-31	MILLINGTON; Nicholas A J [Us] et al.	
	298	8238578		2012-08-07	AYLWARD; J. Richard	
	299	8243961		2012-08-14	MORRILL; Daniel Lawrence	
	300	8265310		2012-09-11	BERARDI; William 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					

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]	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]

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	1	2320451	CA	A1	2001-03-23	BONNEVILLE MARC ETIENNE [CA]		
	2	101667414	CN	A	2010-03-10	SONY CORP.		
	3	1598767	CN	A	2005-03-23	XIAO XUEWEN.		
	4	1871838	CN	A	2006-11-29	SANYO ELECTRIC CO.		
	5	0742674	EP	B1	2014-04-09	TOSHIBA KK [JP]		
	6	1124175	EP	A2	2001-08-16	NOKIA CORP [FI]		
	7	1133896	EP	B1	2002-08-28	BANG & OLUFSEN A/S.		
	8	1312188	EP	A1	2003-05-21	BRITISH TELECOMM [GB]		
	9	1389853	EP	A1	2004-02-18	SONY INT EUROPE GMBH.		
	10	1410686	EP		2008-03-26	DOLBY LAB LICENSING CORPORATION.		
	11	1416687	EP	B1	2006-08-02	AVID TECHNOLOGY, INC.		

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	1517464	EP	A2	2005-03-23	PHOENIX GOLD INTERNATIONAL INC.		
	13	1825713	EP	B1	2012-10-17	BANG & OLUFSEN AS.		
	14	2860992	EP	A1	2015-04-15	SAMSUNG ELECTRONICS CO LTD [KR]		
	15	2379533	GB	A	2003-03-12	REQUEST MULTIMEDIA [US]		
	16	2000149391	JP	A	2000-05-30	VICTOR COMPANY OF JAPAN.		
	17	2001210019	JP	A	2001-08-03	KENWOOD CORP.		X
	18	2002111817	JP		2002-04-12	NEC CORP.		☐
	19	2003045166	JP	A	2003-02-14	KENWOOD CORP.		☒
	20	2005136457	JP		2005-05-26	SANYO ELECTRIC CO. LTD.		☐
	21	2006054799	JP	A	2006-02-23	CASIO COMPUTER CO LTD.		☐
	22	2006217116	JP		2006-08-17	FUNAI ELECTRIC CO LTD.		☐

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	23	2007323789	JP		2007-12-13			☐
	24	2007336517	JP	A	2007-12-27	LG ELECTRONICS INC.		☐
	25	2009135750	JP		2009-06-18	KYOCERA CORP.		☐
	26	2011055043	JP	A	2011-03-17	CASIO HITACHI MOBILE COMM CO.		☐
	27	2011130496	JP		2011-06-30	TOSHIBA CORP.		☐
	28	63269633	JP		1988-11-07	UNKNOWN.		☐
	29	20040031853	KR		2004-04-14	MICRONIC SYSTEM CO LTD.		☒
	30	2015024881	WO		2015-02-26	BANG & OLUFSEN AS [DK]		☒
	31	439027	TW		2001-06-07	MITAC TECHNOLOGY CORP.		☐
	32	0019693	WO	A1	2000-04-06	WIRELESS SYSTEM TECHNOLOGIES I [CA], et al.		☐
	33	1999023560	WO		1999-05-14	COLLABORATION PROPERTIES, INC.		☐

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	200153994	WO		2001-07-26	FRISKIT, INC.		☐
	35	2003093950	WO	A2	2003-11-13	GOLDBERG, BENJAMIN, M. et al.		☐
	36	2007135581	WO	A2	2007-11-29	KONINKL PHILIPS ELECTRONICS NV [NL], et al.		☐
	37	2008082350	WO	A1	2008-07-10	SCANIA CV ABP [SE], et al.		☐

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]
	1		

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/10/11/2019	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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	LOUDERBACK, Jim, "Affordable Audio Receiver Furnishes Homes With MP3," TechTV Vault. 28 June 2000 retrieved 10 July 2014, 2 pages.	
	2	MediaRenderer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	3	MediaServer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	4	Microsoft, Universal Plug and Play (UPnP) Client Support ("Microsoft UPnP") (August 2001) (D+M_0402007-24) (18 pages).	
	5	Microsoft Window's XP Reviewer's Guide (August 2001) (D+M_0402225-85) (61 pages).	
	6	"Microsoft Windows XP File and Printer Share with Microsoft Windows" Microsoft Windows XP Technical Article, 2003, 65 pages.	
	7	"Model MRC44 Four Zone - Four Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2002, 52 pages.	
	8	"SMPTE Made Simple: A Time Code Tutor by Timeline," 1996, 46 pages.	
	9	Network Time Protocol (NTP), RFC 1305 (Mar. 1992) (D+M_0397417-536) (120 pages).	
	10	"NexSys Software v.3 Manual," Crest Audio, Inc., 1997, 76 pages.	
	11	NIEDERST, JENNIFER "O'Reilly Web Design in a Nutshell," Second Edition, September 2001, 678 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	12	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/684927, filed 13 April 2015, 10 pages.	
	13	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/813961, filed 30 July 2015, 10 pages.	
	14	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2014, 16 pages.	
	15	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 13 pages.	
	16	Non-Final Office Action mailed on 11 September 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 11 pages.	
	17	Non-Final Office Action mailed on 24 April 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 11 pages.	
	18	Non-Final Office Action mailed on 25 September 2013, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	19	Notice of Allowance mailed on 01 October 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 14 pages.	
	20	Notice of Allowance mailed on 10 April 2015, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 16 pages.	
	21	Notice of Allowance mailed on 16 February 2017, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	
	22	Notice of Allowance mailed on 18 August 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

	23	Notice of Allowance mailed on 22 March 2017, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 7 pages.	
	24	Notice of Allowance mailed on 27 August 2018, issued in connection with U.S. Patent Application No. 15/583553, filed on 1 May 2017, 7 pages.	
	25	Notice of Allowance mailed on 28 June 2017, issued in connection with U.S. Patent Application No. 14/813961, filed on 30 July 2015, 7 pages.	
	26	Notice of Allowance mailed on 28 September 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 10 pages.	
	27	Notice of Allowance mailed on 30 June 2017, issued in connection with U.S. Patent Application No. 14/684927, filed on 13 April 2015, 8 pages.	
	28	Notice of Allowance mailed on 5 November 2018, issued in connection with U.S. Patent Application No. 15/688204, filed on 28 August 2017, 7 pages.	
	29	Notice of Incomplete Re-Exam Request mailed on 25 May 2017, issued in connection with U.S. Patent Application No. 90/013959 , filed on 01 April 2016, 10 pages.	
	30	Office Action in Ex Parte Reexamination mailed on 20 October 2017, issued in connection with U.S. Patent Reexamination Application No. 90/013959, filed on 16 June 2017, 50 pages.	
	31	Palm, Inc., "Handbook for the Palm VII Handheld," May 2000, 311 pages.	
	32	Parasound Zpre2 Zone Preamplifier with PTZI Remote Control, 2005, 16 pages.	
	33	PILLAI et al., "A Method to Improve the Robustness of MPEG Video Applications over Wireless Networks," Kent Ridge Digital Labs, 2000, 15 pages.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Presentations at WinHEC 2000, May 2000, 138 pages.	
	35	Proficient Audio Systems M6 Quick Start Guide, 2011, 5 pages.	
	36	Proficient Audio Systems: Proficient Editor Advanced Programming Guide, 2007, 40 pages.	
	37	Programming Interface for WL54040 Dual-Band Wireless Transceiver, AVAGO0066, Agere Systems, May 2004, 16 pages.	
	38	Radio Shack, "Auto-Sensing 4-Way Audio/Video Selector Switch," 2004, 1 page.	
	39	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 1, 100 pages.	
	40	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 2, 100 pages.	
	41	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 3, 100 pages.	
	42	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 4, 100 pages.	
	43	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 5, 46 pages.	
	44	RANGAN et al., "Feedback Techniques for Continuity and Synchronization in Multimedia Information Retrieval," ACM Transactions on Information Systems, 1995, pp. 145-176, Vol. 13, No. 2.	

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Real Time Control Protocol (RTCP) and Realtime Transfer Protocol (RTP), RFC 1889 (Jan. 1996) (D+M_0397810-84) (75 pages).	
	46	Realtime Streaming Protocol (RTSP), RFC 2326 (Apr. 1998) (D+M_0397945-8036) (92 pages).	
	47	Realtime Transport Protocol (RTP), RFC 3550 (July 2003) (D+M_0398235-323) (89 pages).	
	48	REID, Mark, "Multimedia conferencing over ISDN and IP networks using ITU-T H-series recommendations: architecture, control and coordination," Computer Networks, 1999, pp. 225-235, Vol. 31.	
	49	RenderingControl:1 Service Template Version 1.01 For UPnP, Version 1.0, (June 25, 2002) (SONDM000115187-249) (63 pages).	
	50	Renewed Request for Ex Parte Re-Examination, U.S. Application No. 90/013959 filed 16 June 2017, 126 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/	Date Considered	10/11/2019

*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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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./

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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)

CONFIRMATION NO. 7844

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

PUBLICATION NOTICE

OC000000107682295

Title: Networked Playback Device

Publication No.US-2019-0121604-A1
Publication Date:04/25/2019

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

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2688
Examiner Name	MCCORD, PAUL C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	1	'884+ Automatic Matrix Mixer Control System," Ivie Technologies, Inc., 2000, pp. 1-4.	
	2	Advanced Driver Tab User Interface WaveLan GUI Guide, AVAGO0009, Agere Systems, February 2004, 4 pages.	
	3	Advisory Action mailed on 01 August 2014, issued in connection with U.S. Patent Application No. 13/186249, filed on 19 July 2011, 2 pages.	
	4	Agere Systems' Voice-over-Wireless LAN (VoWLAN) Station Quality of Service, AVAGO0015, Agere Systems, January 2005, 5 pages.	
	5	AKYILDIZ et al., "Multimedia Group Synchronization Protocols for Integrated Services Networks," IEEE Journal on Selected Areas in Communications, 1996 pp. 162-173, Vol. 14, No. 1.	
	6	Audio Authority: How to Install and Use the Model 1154 Signal Sensing Auto Selector, 2002, 4 pages.	
	7	Audio Authority: Model 1154B High Definition AV Auto Selector, 2008, 8 pages.	
	8	AudioSource: AMP 100 User Manual, 2003, 4 pages.	
	9	AudioTron Quick Start Guide, Version 1.0, March 2001, 24 pages.	
	10	AudioTron Reference Manual, Version 3.0, May 2002, 70 pages.	
	11	AudioTron Setup Guide, Version 3.0, May 2002, 38 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	12	Automatic Profile Hunting Functional Description, AVAGO0013, Agere Systems, February 2004, 2 pages.	
	13	'A/V Surround Receiver AVR-5800," Denon Electronics, 2000, 2 pages.	
	14	'A/V System Controleer, Owner's Manual," B&K Compontents, Ltd., 1998, 52 pages.	
	15	AVTransport:1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (66 pages).	
	16	AXIS Communication: AXIS P8221 Network I/O Audio Module, 2009, 41 pages.	
	17	BALFANZ et al., "Network-in-a-Box: How to Set Up a Secure Wireless Network in Under a Minute," 13th USENIX Security Symposium - Technical Paper, 2002, 23 pages.	
	18	BALFANZ et al., "Talking To Strangers: Authentication in Ad-Hoc Wireless Networks," Xerox Palo Alto Research Center, 2002, 13 pages.	
	19	BARHAM et al., "Wide Area Audio Synchronisation," University of Cambridge Computer Laboratory, 1995, 5 pages.	
	20	Bluetooth. "Specification of the Bluetooth System: The ad hoc SCATTERNET for affordable and highly functional wireless connectivity," Core, Version 1.0 A, 26 July 1999, 1068 pages.	
	21	Bluetooth. "Specification of the Bluetooth System: Wireless connections made easy," Core, Version 1.0 B, 1 December 1999, 1076 pages.	
	22	Bogen Communications, Inc., ProMatrix Digitally Matrixed Amplifier Model PM3180, Copyright1996, 2 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	23	BRASSIL et al., "Enhancing Internet Streaming Media with Cueing Protocols," 2000, 9 pages.	
	24	BREEBAART et al., "Multi-Channel Goes Mobile: MPEG Surround Binaural Rendering," AES 29th International Conference, September 2-4, 2006, pp. 1-13.	
	25	CEN et al., "A Distributed Real-Time MPEG Video Audio Player," Department of Computer Science and Engineering, Oregon Graduate Institute of Science and Technology, 1995, 12 pages.	
	26	Change Notification: Agere Systems WaveLan Multimode Reference Design (D2 to D3), AVAGO0042, Agere Systems, November 2004, 2 pages.	
	27	CHINESE PATENT OFFICE, Chinese Office Action mailed on 03 May 2016, issued in connection with Chinese Application No. 201280045592.8, 18 pages.	
	28	CHINESE PATENT OFFICE, Second Office Action mailed on 31 March 2016, issued in connection with Chinese Application No. 201280029979.4, 6 pages.	
	29	CHINESE PATENT OFFICE,First Office Action mailed on 05 August 2015, issued in connection with Chinese Application No. 201280029979.4, 12 pages.	
	30	Connection Manager: 1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (25 pages).	
	31	ContentDirectory:1 Service Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (89 pages).	
	32	Corrected Notice of Allowability mailed on 24 November 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 2 pages.	
	33	DANNENBERG et al., "A. System Supporting Flexible Distributed Real-Time Music Processing," Proceedings of the 2001 International Computer Music Conference, 2001, 4 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	34	DANNENBERG, Roger B., "Remote Access to Interactive Media," Proceedings of the SPIE 1785, 1993, pp. 230-237.	
	35	DAY, Rebecca, "Going Elan!" Primedia Inc., 2003, 4 pages.	
	36	Deep-Sleep Implementation in WL60011 for IEEE 802.11b Applications, AVAGO0020, Agere Systems, July 2004, 22 pages.	
	37	Dell, Inc. "Dell Digital Audio Receiver: Reference Guide," June 2000, 70 pages.	
	38	Dell, Inc. "Start Here," June 2000, 2 pages.	
	39	"Denon 2003-2004 Product Catalog," Denon, 2003-2004, 44 pages.	
	40	Denon AV Surround Receiver AVR-1604/684 User's Manual, 2004, 128 pages.	
	41	Denon AV Surround Receiver AVR-5800 Operating Instructions, Copyright 2000, 67 pages.	
	42	Designing a UPnP AV MediaServer, Nelson Kidd (2003) (SONDM000115062-116) (55 pages).	
	43	"DP-0206 Digital Signal Processor," TOA Electronics, Inc., 2001, pp. 1-12.	
	44	EUROPEAN PATENT OFFICE, European Examination Report mailed on 14 December 2015, issued in connection with European Application No. 12814263.5, 6 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	45	EUROPEAN PATENT OFFICE, European Extended Examination Report mailed on 05 January 2016, issued in connection with European Application No. 15002531.0, 8 pages.	
	46	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 17 October 2018, issued in connection with European Application No. 18187618.6, 6 pages.	
	47	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 18 August 2017, issued in connection with EP Application No. 17000923.7, 5 pages.	
	48	EUROPEAN PATENT OFFICE, European Extended Search Report mailed on 5 February 2019, issued in connection with European Application No. 18209665.1, 5 pages.	
	49	EUROPEAN PATENT OFFICE, European Office Action mailed on 09 November 2016, issued in connection with European Application No. 15002531.0 - 1568, 4 pages.	
	50	EUROPEAN PATENT OFFICE, European Office Action mailed on 21 August 2017, issued in connection with European Application No. 17175867.5, 5 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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.

Electronic Acknowledgement Receipt	
EFS ID:	35370881
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:46:16
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	IVIE_TECHSAUTOMIXERCONTROL.PDF	6456932 b011b7a1890fbde3ecb5e965161a3b76c8e37513	no	4

Warnings:

Information:					
2	Non Patent Literature	ADVANCED_DRIVER_AGERE_AVAGO0009_V2.PDF	184275 d4a2b4bcc5e62edc8e25778bff9fe32082a2e476	no	4
Warnings:					
Information:					
3	Non Patent Literature	13186249_ADVISORY_ACTION_8-1-14.PDF	122366 1e0a99c36c51d0c6aeb301de26d9313d409d9922	no	2
Warnings:					
Information:					
4	Non Patent Literature	AGERE_SYSTEMS_VOICE-OVER_AVAGO0015_V2.PDF	1176635 1f6d4f2c01c3d9ac34eefc74720d3ab8d2d89849	no	5
Warnings:					
Information:					
5	Non Patent Literature	AKYILDIZ_1996.PDF	2499003 8a869e3c78f04f744bf3557381be46aff2d3ceb0	no	12
Warnings:					
Information:					
6	Non Patent Literature	AUDIO_AUTHORITY_SIGNAL_SENSING_2002.PDF	4041798 dff7784296ed6d4488429d3af294fef3dcb6b555	no	4
Warnings:					
Information:					
7	Non Patent Literature	AUDIO_AUTHORITY_HIGH_DEFINITION_2008.PDF	8015872 f64dcc70241558ecb971c3de2aefd2845f431eaa	no	8
Warnings:					
Information:					
8	Non Patent Literature	AUDIO_SOURCE_AMP_100.PDF	4906940 11dc6df5b0df5330bd7c06a1fb3e52037e5e621a	no	4
Warnings:					
Information:					

9	Non Patent Literature	AUDIOTRONQUICKSTARTGUIDE_V2.PDF	8003306 68d18f702aa02a5d9705c13ea29cbf74d0ef40ca	no	24
Warnings:					
Information:					
10	Non Patent Literature	AUDIOTRONREFERENCEMANUAL_V2.PDF	13501686 0a1073485e8dcd1da2d5986a3ccb6c2df69c28d7	no	70
Warnings:					
Information:					
11	Non Patent Literature	AUDIOTRONSETUPGUIDE_V2.PDF	11297159 9b29308bcec2143809f7700841126c88fde3def5	no	38
Warnings:					
Information:					
12	Non Patent Literature	AUTOMATIC_PROFILE_AGERE_AVAGO0013_V2.PDF	124603 663ce3417ade29bfbfa0c399c438a5088d88eeea	no	2
Warnings:					
Information:					
13	Non Patent Literature	DENON_AVR-5800-2PAGES.PDF	3223291 8e5b26fd3cec9ea4211230e16f2faa5d29840578	no	2
Warnings:					
Information:					
14	Non Patent Literature	BK_COMPONENTS-52PAGES.PDF	3579168 128cb78d1a7bd2a55c2f74c41e97cf5cc07cadcc	no	52
Warnings:					
Information:					
15	Non Patent Literature	AVTRANSPORT_V1_2002_66PAGES.PDF	438810 5b3625001968f78015af1f092e04310895b192b3	no	66
Warnings:					
Information:					

16	Non Patent Literature	AXIS_P8221_USER_MANUAL.PDF	1617965 e36f6b1a94da0269a2e216c77c7236c2a20613ea	no	41
Warnings:					
Information:					
17	Non Patent Literature	BALFANZ_NETWORK-IN-A-BOX_2002.PDF	20050777 8555b764fc5668318395a210ed17da20b1b9b052	no	23
Warnings:					
Information:					
18	Non Patent Literature	BALFANZ_TALKING-TO-STRANGERS_2002.PDF	23823515 73dcb39daca45ca0b57755da29a2904ca62a7ac1	no	13
Warnings:					
Information:					
19	Non Patent Literature	BARHAM_1995.PDF	2208674 fa895d0cb313307a4264db86d14ef40d6a1e8d2a	no	5
Warnings:					
Information:					
20	Non Patent Literature	BLUETOOTH_SPEC_JUL_1999-1OF4_REDUCED.PDF	9230492 704feaed331f111655dabf79deec3ff58eb7b8c6	no	267
Warnings:					
Information:					
21	Non Patent Literature	BLUETOOTH_SPEC_JUL_1999-2OF4REDUCED.PDF	8213582 fadaa488127eb675b2089d3626d4c59f5e1f505b	no	267
Warnings:					
Information:					
22	Non Patent Literature	BLUETOOTH_SPEC_JUL_1999-3OF4_REDUCED.PDF	7213842 bb03829ee6722aa7a842c7875071815e06778dab	no	267
Warnings:					
Information:					

23	Non Patent Literature	BLUETOOTH_SPEC_JUL_1999-4 OF4REDUCED.PDF	6836459 dc07bb1db2eefcc4ca9e88ae080459b9fb826ed0	no	267
Warnings:					
Information:					
24	Non Patent Literature	BLUETOOTH_SPEC_DEC1999_1 OF4REDUCED.PDF	7900586 50bb8fc96a35a1105d091d01fbbe8520da434274	no	270
Warnings:					
Information:					
25	Non Patent Literature	BLUETOOTH_SPEC_DEC1999_2 OF4REDUCED.PDF	7169931 af2a72ef0d7e7438c59b6fb36c97c710904261d8	no	270
Warnings:					
Information:					
26	Non Patent Literature	BLUETOOTH_SPEC_DEC1999_3 OF4REDUCED.PDF	6803902 7d59cf98fb14c2afdae792ce7d960a839b3cf0fc	no	270
Warnings:					
Information:					
27	Non Patent Literature	BLUETOOTH_SPEC_DEC1999_4 OF4REDUCED.PDF	5975381 17371b72a7d9b4fa69df7a5727ca5405ebb04077	no	266
Warnings:					
Information:					
28	Non Patent Literature	BOGEN_PROMATRIX_1996_2P AGES.PDF	226066 400105c8759d301bccbf89f6b2039e9468791417	no	2
Warnings:					
Information:					
29	Non Patent Literature	BRASSIL.PDF	17621943 959cbf02429ee61057d4ee676d7f99e3c63b2005	no	9
Warnings:					
Information:					

30	Non Patent Literature	BREEBAART_2006.PDF	19712856 0cec0c4ed22dad00dea591e00c890b11dc5d0585	no	13
Warnings:					
Information:					
31	Non Patent Literature	CEN_1995.PDF	12536896 4889122ea8a7b54b9767ff674a11d92674f59442	no	12
Warnings:					
Information:					
32	Non Patent Literature	CHANGE_NOTIFICATION_AVAGO0042-V2.PDF	448506 34643fd4abc2cf948b4d151003fa21499a50c8c4	no	2
Warnings:					
Information:					
33	Non Patent Literature	CHINESE_NO_2012800455928_OFFICE_ACTION_5-3-16.PDF	383165 46550b3319e3bbd18fe16f7a677b5edfa725dfa3	no	18
Warnings:					
Information:					
34	Non Patent Literature	CN201280029979-4_SECOND_OA_05-31-2016.PDF	216833 cfea3de5ce8aea77d30045631b425e95609463aa	no	6
Warnings:					
Information:					
35	Non Patent Literature	CN201280029979-4_OA_8-5-15.PDF	451081 65d1d65cd65a05e460113a2fa8bdf66ad055ba6c	no	12
Warnings:					
Information:					
36	Non Patent Literature	CONNECTIONMANAGER_V1_2002_25PAGES.PDF	565998 39ffedbddabfa39251516eae6e162e192c628c29	no	25
Warnings:					
Information:					

37	Non Patent Literature	CONTENTDIRECTORY_V1_2002_89PAGES.PDF	605416 a72140a728367bfc74f14a61790fddef37cc8f0a	no	89
Warnings:					
Information:					
38	Non Patent Literature	13089167_NOA_CORRECTED_11-24-2014.PDF	85902 e4780b9c359b98ce54c2e529ffcde85818fd30c6	no	2
Warnings:					
Information:					
39	Non Patent Literature	DANNENBERG_2001.PDF	8402099 6a1e14591fac14b428f173e4549fb72bac655040	no	4
Warnings:					
Information:					
40	Non Patent Literature	DANNENBERG_1993.PDF	12753317 6aa78fb27e1db3f44c2e3e8e8365012df4289ae4	no	8
Warnings:					
Information:					
41	Non Patent Literature	DAY_GOING_ELAN_PRIMEDIA_2003.PDF	3888922 1f51a58a75a7f60f833277492156345e65dae183	no	4
Warnings:					
Information:					
42	Non Patent Literature	DEEP-SLEEP_AVAGO0020-V2.PDF	3412195 05457cf926bf5ecde7258924dd5205685c96692e	no	22
Warnings:					
Information:					
43	Non Patent Literature	DELL_REFERENCE_GUIDE_JUNE2000.PDF	3684104 f828118a38daa1f2ec0e16248c89c00ce0ddb455	no	70
Warnings:					
Information:					

44	Non Patent Literature	DELL_START_HERE_JUNE2000-V2.PDF	639158 7c70335482b871b343b3e7430474221e35f8f60d	no	2
Warnings:					
Information:					
45	Non Patent Literature	DENON_2003-2004_PRODUCT_GUIDE.PDF	12145801 9122af1693aad0b0c1b9b849fa47bffbd647684e	no	44
Warnings:					
Information:					
46	Non Patent Literature	DENON_AV_SURROUND_RECEIVER_AVR1604-128PAGES-V2.PDF	16228236 def92dce3f374a75a9bb243fa750376f4db0dd77	no	128
Warnings:					
Information:					
47	Non Patent Literature	DENON_AVR-5800_OPERATING_INSTRUCTIONS_67PAGES.PDF	12257956 5266259f23fdf3b9979fd7ae4971a065fd8473c6	no	67
Warnings:					
Information:					
48	Non Patent Literature	DESIGNING_A_UPNP_AV_MEDIASERVER_KIDD_SONDM000115062-116_55PAGES.PDF	23701179 3abc025375056fb3500bae8ee39ff77373c9c19d	no	55
Warnings:					
Information:					
49	Non Patent Literature	TOA_ELECTRONICS_DP-0206_2001-12PAGES-V2.PDF	12153169 c554cc784ddec4e60d2642cfb92f9ab190a1d409	no	12
Warnings:					
Information:					
50	Non Patent Literature	128142635_EP-_EXAMINATION_REPORT_12-14-15_6PAGES.PDF	242232 fe9e289239b80e9e669dcb28bf6430ba6be2b142	no	6
Warnings:					
Information:					

51	Non Patent Literature	150025310_EP_EXTENDED_SEARCH_REPORT_1-5-16.PDF	372676 7cd246b28d5d2123ca8a9bafbe6de9116e214f7a	no	8
Warnings:					
Information:					
52	Non Patent Literature	181876186_EP_Extended_SR_11-0501-EP-DIV3_6pages.pdf	576455 4ed641e34e54982df9de2a0d508d9f7e39d6450a	no	6
Warnings:					
Information:					
53	Non Patent Literature	170009237_EP_EXTENDED_SR_11-0501-EP-DIV2_8-18-17_5PAGES.PDF	247105 24d8e9905d70d581da7defefd5aad7296cfdfdaf	no	5
Warnings:					
Information:					
54	Non Patent Literature	182096651_EP_EXTENDED_SR_11-0403-EP-DIV4_2-5-19_5PAGES.PDF	523279 0ac038cab5c944d325ee877e10ab3976fbfff56a	no	5
Warnings:					
Information:					
55	Non Patent Literature	EUROPEAN_NO_15002531_OFFICE_ACTION_11-9-16.PDF	167057 368e05ec6db08b0c82ad2d7d93275e6d829e5a1a	no	4
Warnings:					
Information:					
56	Non Patent Literature	17158675_EP_SR_11-0403-EP-DIV3_5PAGES.PDF	294097 fcd8f541d22e80e4600a5a4c53e2e3869d7241ce	no	5
Warnings:					
Information:					
57	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_6_IDS_20190306170447.pdf	1056055 29eda4d4e9583ce3dd38314451891 57ad7e10047	no	8
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.

Total Files Size (in bytes):	340216704

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.

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	1	Understanding Universal Plug and Play, Microsoft White Paper (June 2000) (D+M_0402074-118) (45 pages).	
	2	UNITED STATES PATENT AND TRADEMARK OFFICE, U.S. Provisional Application No. 60/490,768 filed on 28 July 2003, entitled "Method for synchronizing audio playback between multiple networked devices," 13 pages.	
	3	UNITED STATES PATENT AND TRADEMARK OFFICE, U.S. Provisional Application No. 60/825,407 filed on 12 September 2006, entitled "Controlling and manipulating groupings in a multi-zone music or media system," 82 pages.	
	4	Universal Plug and Play Device Architecture V. 1.0, (June 8, 2000) (54 pages).	
	5	Universal Plug and Play in Windows XP, Tom Fout. Microsoft Corporation (July 2001) (D+M_0402041-73) (33 pages).	
	6	Universal Plug and Play ("UPnP") AV Architecture:1 For UPnP, Version 1.0, (June 25, 2002) (D+M_0298151-72) (22 pages).	
	7	Universal Plug and Play Vendor's Implementation Guide (January 5, 2000) (7 pages).	
	8	UPnP AV Architecture:0.83 (June 12, 2002) (SONDM000115483-504) (22 pages).	
	9	UPnP Design by Example, A Software Developers Guide to Universal Plug and Play Michael Jeronimo and JackWeast, Intel Press (D+M_0401307-818) (April 2003) (511 pages).	
	10	UPnP; "Universal Plug and Play Device Architecture," 08 June 2000; version 1.0; Microsoft Corporation; pp 1-54.	
	11	WANCommonInterfaceConfig:1 Service Template Version 1.01 For UPnP, Ver. 1.0 (November 12, 2001) (D+M_0401820-43) (24 pages).	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	12	WANIPConnection:1 Service Template Version 1.01 For UPnP Ver. 1.0 (November 12, 2001) (D+M_0401844-917) (74 pages).	
	13	WANPPPConnection:1 Service Template Version 1.01 For UPnP, Version 1.0 (November 12, 2001) (D +M_0401918-2006) (89 pages).	
	14	WaveLan High-Speed Multimode Chip Set, AVAGO0003, Agere Systems, February 2003, 4 pages.	
	15	WaveLan High-Speed Multimode Chip Set, AVAGO0005, Agere Systems, February 2003, 4 pages.	
	16	WaveLAN Wireless Integration Developer Kit (WI-DK) for Access Point Developers, AVAGO0054, Agere Systems, July 2003, 2 pages.	
	17	WaveLAN Wireless Integration-Developer Kit (WI-DK) Hardware Control Function (HCF), AVAGO0052, Agere Systems, July 2003, 2 pages.	
	18	WI-DK Release 2 WaveLan Embedded Drivers for VxWorks and Linux, AVAGO0056, Agere Systems, July 2003, 2 pages.	
	19	WI-DK Release 2 WaveLan END Reference Driver for VxWorks, AVAGO0044, Agere Systems, July 2003, 4 pages.	
	20	WI-DK Release 2 WaveLan LKM Reference Drivers for Linux, AVAGO0048, Agere Systems, July 2003, 4 pages.	
	21	Windows Media Connect Device Compatibility Specification (April 12, 2004) (16 pages).	
	22	WPA Reauthentication Rates, AVAGO0063, Agere Systems, February 2004, 3 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

	23	Yamaha DME 64 Owner's Manual; copyright 2004, 80 pages.	
	24	Yamaha DME Designer 3.5 setup manual guide; copyright 2004, 16 pages.	
	25	Yamaha DME Designer 3.5 User Manual; Copyright 2004, 507 pages.	
	26	"Symantec pcAnywhere User's Guide," v 10.5.1, 1995-2002, 154 pages.	
	27	"Systemline Modular Installation Guide, Multiroom System," Systemline, 2003, pp. 1-22.	
	28	"ZR-8630AV MultiZone Audio/Video Receiver, Installation and Operation Guide," Niles Audio Corporation, 2003, 86 pages.	
	29	ZX135: Installation Manual,LA Audio, April 2003, 44 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2688
	Examiner Name	MCCORD, PAUL C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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.

Electronic Acknowledgement Receipt	
EFS ID:	35371381
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:44:25
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	UNDERSTANDING_UNIVERSAL_PLUG_AND_PLAY_DM_0402074-118_45PAGES.PDF	9005889 431cbe90f9a08914e3cb93fa280a23b2fcd28814	no	45
Warnings:					

Information:					
2	Non Patent Literature	60490768_APPLICATION_AS_FILED.PDF	398895 2e14f32fdfe4c9586584837c348fa0225cf3ea18	no	13
Warnings:					
Information:					
3	Non Patent Literature	60825407_APPLICATION_AS_FILED.PDF	6702353 05b6cb160da42c57ff258ba118197dc6f6fab263	no	82
Warnings:					
Information:					
4	Non Patent Literature	UNIVERSAL_PLUG_AND_PLAY_DEVICE_UPNP_2000_V1_54PAGES.PDF	3033111 4fc9201973ba3a7a92f039585f4854f1d7e14207	no	54
Warnings:					
Information:					
5	Non Patent Literature	UNIVERSAL_PLUG_AND_PLAY_DM_0402041-73_33PAGES.PDF	9144769 ee301763531b3ea9e00ca230963d5f3cc0d5c2d8	no	33
Warnings:					
Information:					
6	Non Patent Literature	UNIVERSAL_PLUG_AND_PLAY_DM_0298151-72_22PAGES.PDF	3308815 ab6cb4c8625458677ced57470ae5704786b56055	no	22
Warnings:					
Information:					
7	Non Patent Literature	UNIVERSAL_PLUG_AND_PLAY_PLUGFEST_VENDORGUIDE_2000_7PAGES.PDF	94631 6d33af37a20b364ce9eaaeb13d1b04fc2cac6796	no	7
Warnings:					
Information:					
8	Non Patent Literature	UPNP_AV_ARCHITECHTURE_SONDM000115483_22PAGES.PDF	2988946 20d7e8d15e1716ba753271e6613e1f05a37b3111	no	22
Warnings:					
Information:					

9	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART1.PDF	18363066 0ab3558a359713bbf1746a3375dc654f2f28c6b9	no	40
Warnings:					
Information:					
10	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART2.PDF	22683681 f6ac1bf7a33586153193c38fc4b7c7b80e4441f0	no	45
Warnings:					
Information:					
11	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART3.PDF	18982276 a6cb278139dcc7e0a902157544d8f2aeed50b3d5	no	40
Warnings:					
Information:					
12	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART4.PDF	22429801 112ab353feb86f8254a902e79a286c10fd61946c	no	46
Warnings:					
Information:					
13	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART5.PDF	17097510 92d3bf48f070d240cf738689a83b2b6316685db4	no	40
Warnings:					
Information:					
14	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART6.PDF	23718429 eced5b4ddf38fc94407a03dac47087fb201aa13c	no	46
Warnings:					
Information:					
15	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART7.PDF	18518123 126449ce719b0289205b8cc519edfb6853d63eba	no	40
Warnings:					
Information:					

16	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART8.PDF	22296712 d6657aed7ac543e44478c96315b8511708b22dd6	no	46
Warnings:					
Information:					
17	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART9.PDF	16949715 4ef9c87b9ee126ea675108945b0d812ec8a17b2d	no	40
Warnings:					
Information:					
18	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART10.PDF	18459730 1cf33aec993f1a7335998a0c00233163d3bd09c3	no	46
Warnings:					
Information:					
19	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART11.PDF	18348888 6dde44998aaab5c5903fcec3b8bf7ab69236d5c1	no	40
Warnings:					
Information:					
20	Non Patent Literature	UPNP_DESIGN_BY_EXAMPLE_DM_0401307-818_511PAGES_PART12.PDF	17908411 9aeed564f93a1fa7bc155b782eafdc9bfa3aac6c	no	42
Warnings:					
Information:					
21	Non Patent Literature	UPNP_2000-54PAGES.PDF	3033113 676c892f753f51c42239f3711d2eeaafba55843d	no	54
Warnings:					
Information:					
22	Non Patent Literature	WANCOMMONINTERFACE_DM 0401820-43_24PAGES.PDF	23867914 6355aec41da9c1e0e40e4a0f73f3e9652e8cd59d	no	24
Warnings:					
Information:					

23	Non Patent Literature	WANIPCONNECTION_DM_0401844-917_74PAGES_PART1.PDF	16191225 9e75641d1ff9eea5e4d99cdb899014ac3588cf64	no	20
Warnings:					
Information:					
24	Non Patent Literature	WANIPCONNECTION_DM_0401844-917_74PAGES_PART2.PDF	7463665 4ebd6206e9c7f12183906e8f79c9089df7f04c8e	no	10
Warnings:					
Information:					
25	Non Patent Literature	WANIPCONNECTION_DM_0401844-917_74PAGES_PART3.PDF	20239702 af14354b863687ac93e61909c12f991f468a5084	no	10
Warnings:					
Information:					
26	Non Patent Literature	WANIPCONNECTION_DM_0401844-917_74PAGES_PART4.PDF	5902532 8545a65c8048caf97b0d5d6a730d653e8bcd5c1d	no	34
Warnings:					
Information:					
27	Non Patent Literature	WANPPPCONNECTION_DM_0401918-2006_89PAGES_PART1.PDF	17502187 4db5d55e5f03711f94ec16a6434ab53033a8d167	no	20
Warnings:					
Information:					
28	Non Patent Literature	WANPPPCONNECTION_DM_0401918-2006_89PAGES_PART2.PDF	14092119 c30db9d2342d005d8a5f13dffc5ed2215181e51b	no	20
Warnings:					
Information:					
29	Non Patent Literature	WANPPPCONNECTION_DM_0401918-2006_89PAGES_PART3.PDF	18976631 ee16d6a420bb42ea5a07ee9e0a6ed9d72fb3a7ff	no	10
Warnings:					
Information:					

30	Non Patent Literature	WANPPPCONNECTION_DM_04 01918-2006_89PAGES_PART4. PDF	8969677 5708bc470ffcbdc67deb0b8d664c2158ced 134ad	no	10
Warnings:					
Information:					
31	Non Patent Literature	WAVELAN_AGERE_AVAGO0003 _V2.PDF	145160 6b7c967604f94696b64ff3f42ffb38ea007f7 3e6	no	4
Warnings:					
Information:					
32	Non Patent Literature	WAVELAN_AGERE_AVAGO0005 _V2.PDF	522815 9d93157544eb4633ad263eb56b2fb538a6f 9fd15	no	4
Warnings:					
Information:					
33	Non Patent Literature	WAVELAN_WIRELESS_INTEGRA TION_AVAGO0054_V2.PDF	504855 17855728d251dc453bc0877e48a3ea07a40 fddf9	no	2
Warnings:					
Information:					
34	Non Patent Literature	WAVELAN_WIRELESS_INTEGRA TION_AVAGO0052_V2.PDF	400567 7baea8b035d0bf3995f709f1e2cad3e4ea8f ee20	no	2
Warnings:					
Information:					
35	Non Patent Literature	WI-DK_RELEASE2_AVAGO0056_V2 .PDF	389254 d840f14b618c34d00f5b81bad217b69224e c6915	no	2
Warnings:					
Information:					
36	Non Patent Literature	WI-DK_RELEASE_END_AVAGO004 4_V2.PDF	529182 661d565e3bdb336944fbb24f3475acd8ec0 7a60f	no	4
Warnings:					
Information:					

37	Non Patent Literature	WI-DK_RELEASE_LKM_AVAGO0048_V2.PDF	567414 b94adff6a0dcfd791bea081357bbbba7646f0fae	no	4
Warnings:					
Information:					
38	Non Patent Literature	WINDOWS_MEDIA_CONNECT_2004_16PAGES.PDF	612040 ee0b92143b3bee5747e88f5aa8918e7f4af92891	no	16
Warnings:					
Information:					
39	Non Patent Literature	WPA_REAUTHENTICATION_AVAGO0063-V2.PDF	764178 c00bafbebeb5685dcf7eec60e469dbee999ed487	no	3
Warnings:					
Information:					
40	Non Patent Literature	YAMAHA_DME-64_OWNERSMANUAL-80PAGES_V2.PDF	16675949 ae19ebfa85ab9483aa13c333adb2d0d783f03125	no	80
Warnings:					
Information:					
41	Non Patent Literature	YAMAHA_DME_DESIGNER-3-5SETUPMANUALGUIDE-16PAGES_V2.PDF	5478942 218af5defb7f5a1700c1c2906d4e0115d963aeee	no	16
Warnings:					
Information:					
42	Non Patent Literature	YAMAHA_3-5_2004_PART1.PDF	10436790 a01f81a15aafc4ba37acc187f72e58aecff77e16	no	128
Warnings:					
Information:					
43	Non Patent Literature	YAMAHA_3-5_2004_PART2.PDF	10428566 fa37300049cc98eb4f533a1324c1589ffb2f7c39	no	135
Warnings:					
Information:					

44	Non Patent Literature	YAMAHA_3-5_2004_PART3.PDF	10373224 e6c2dff79cba08034bef48ef1656b81638bd420c	no	115
Warnings:					
Information:					
45	Non Patent Literature	YAMAHA_3-5_2004_PART4.PDF	10416046 6cfc1dbd8e84711637f9eba45b424974b9da0895	no	93
Warnings:					
Information:					
46	Non Patent Literature	YAMAHA_3-5_2004_PART5.PDF	2885787 907ee694a7e1cb4b84fd39f0209e4a77f5ed1ea8	no	36
Warnings:					
Information:					
47	Non Patent Literature	SYMANTECPCANYWHERE_GUIDE_2002_154PAGES.PDF	10867211 0f649a55eb03b3089579949085f56c4348dd8fec	no	154
Warnings:					
Information:					
48	Non Patent Literature	SYSTEMLINE_MULTI-ROOM_INSTALLATION_GUIDE_2003.PDF	19858129 fbc7e4d596918100e24b72993227ec1bd57580a3	no	22
Warnings:					
Information:					
49	Non Patent Literature	ZR-8630AV_MULTIZONE.PDF	15742058 9a2b84d8b44ccb690f6f2bf2deb06d544fea1dc0	no	86
Warnings:					
Information:					
50	Non Patent Literature	ZX135_INSTALLATION_MANUAL_V2.PDF	14439687 bc9bbf504af02d32da8b7742e16e3fde085c224d	no	44
Warnings:					
Information:					

51	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_5_IDS_20190306170447.pdf	1054766 e03ead68a85a8e96208e9ba106f7255ee7bcb42a	no	6

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.

Total Files Size (in bytes):	539765136

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.

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 4: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,312 filed September 27, 2016, 229 pages.	
	2	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 5: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,637 filed September 27, 2016, 213 pages.	
	3	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 6: Defendants' Invalidity Contentions for U.S. Patent No. 9,042,556 filed September 27, 2016, 162 pages.	
	4	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 7: Defendants' Invalidity Contentions for U.S. Patent No. 9,195,258 filed September 27, 2016, 418 pages.	
	5	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 8: Defendants' Invalidity Contentions for U.S. Patent No. 9,202,509 filed September 27, 2016, 331 pages.	
	6	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 9: Defendants' Invalidity Contentions for U.S. Patent No. 9,213,357 filed September 27, 2016, 251 pages.	
	7	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 1: Defendants' Invalidity Contentions for U.S. Patent No. 7,571,014 filed April 15, 2016, 161 pages.	
	8	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 10: Defendants' Invalidity Contentions for U.S. Patent No. 9,213,357 filed April 15, 2016, 244 pages.	
	9	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 11: Defendants' Invalidity Contentions for U.S. Patent No. 9,219,959 filed April 15, 2016, 172 pages.	
	10	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 12: Defendants' Invalidity Contentions for U.S. Design Patent No. D559,197 filed April 15, 2016, 36 pages.	
	11	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 2: Defendants' Invalidity Contentions for U.S. Patent No. 8,588,949 filed April 15, 2016, 112 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 3: Defendants' Invalidity Contentions for U.S. Patent No. 8,843,224 filed April 15, 2016, 118 pages.	
	13	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 4: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,312 filed April 15, 2016, 217 pages.	
	14	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 5: Defendants' Invalidity Contentions for U.S. Patent No. 8,938,637 filed April 15, 2016, 177 pages.	
	15	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 6: Defendants' Invalidity Contentions for U.S. Patent No. 9,042,556 filed April 15, 2016, 86 pages.	
	16	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 7: Defendants' Invalidity Contentions for U.S. Patent No. 9,130,771 filed April 15, 2016, 203 pages.	
	17	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 8: Defendants' Invalidity Contentions for U.S. Patent No. 9,195,258 filed April 15, 2016, 400 pages.	
	18	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions Exhibit 9: Defendants' Invalidity Contentions for U.S. Patent No. 9,202,509 filed April 15, 2016, 163 pages.	
	19	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Preliminary Identification of Prior Art References, provided July 29, 2016, 5 pages.	
	20	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Brief in Support of their Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided October 12, 2016, 24 pages.	
	21	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Opposition to Sonos's Motion to Strike Defendants' New Amended Answer Submitted with their Reply, provided October 3, 2016, 15 pages.	
	22	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided October 12, 2016, 43 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit B: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided October 12, 2016, 43 pages.	
	24	Sonos, Inc. v. D&M Holdings Inc. et al., Opening Brief in Support of Defendants' Motion for Leave to Amend Their Answer to Add the Defense of Inequitable Conduct, provided August 1, 2016, 11 pages.	
	25	Sonos, Inc. v. D&M Holdings Inc. et al., Order, provided October 7, 2016, 2 pages.	
	26	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff's Opposition to Defendants' Motion for Leave to Amend Their Answer to Add the Defense of Inequitable Conduct, provided August 26, 2016, 25 pages.	
	27	Sonos, Inc. v. D&M Holdings Inc. et al., Redlined Exhibit B: Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, provided August 1, 2016, 27 pages.	
	28	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 206-1, Transcript of 101 Hearing (Nov. 28, 2016) (28 pages).	
	29	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 207, PUBLIC Joint Claim Construction Brief (Nov. 30, 2016) (88 pages).	
	30	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 214, D&M Post-Markman Letter (Dec. 22, 2016) (13 pages).	
	31	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 215, Sonos Post-Markman Letter (Dec. 22, 2016) (15 pages).	
	32	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 219, Claim Construction Opinion (Jan. 12, 2017) (24 pages).	
	33	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 221, Claim Construction Order (Jan. 18 2017) (2 pages).	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), Markman Hearing Transcript (Dec. 14, 2016) (69 pages).	
	35	Sony: AIR-SA 50R Wireless Speaker, Copyright 2009, 2 pages.	
	36	Sony: Altus Quick Setup Guide ALT-SA32PC, Copyright 2009, 2 pages.	
	37	Sony: BD/DVD Home Theatre System Operating Instructions for BDV-E300, E301 and E801, Copyright 2009, 115 pages.	
	38	Sony: BD/DVD Home Theatre System Operating Instructions for BDV-IT1000/BDV-IS1000, Copyright 2008, 159 pages.	
	39	Sony: Blu-ray Disc/DVD Home Theatre System Operating Instructions for BDV-IZ1000W, Copyright 2010, 88 pages.	
	40	Sony: DVD Home Theatre System Operating Instructions for DAV-DZ380W/DZ680W/DZ880W, Copyright 2009, 136 pages.	
	41	Sony: DVD Home Theatre System Operating Instructions for DAV-DZ870W, Copyright 2008, 128 pages.	
	42	Sony Ericsson MS500 User Guide, Copyright 2009, 2 pages.	
	43	Sony: Home Theatre System Operating Instructions for HT-IS100, Copyright 2008, 168 pages.	
	44	Sony: HT-IS100, 5.1 Channel Audio System, last updated November 2009, 2 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Sony: Multi Channel AV Receiver Operating Instructions, 2007, 80 pages.	
	46	Sony: Multi Channel AV Receiver Operating Instructions for STR-DN1000, Copyright 2009, 136 pages.	
	47	Sony: STR-DN1000, Audio Video Receiver, last updated August 2009, 2 pages.	
	48	Sony: Wireless Surround Kit Operating Instructions for WHAT-SA2, Copyright 2010, 56 pages.	
	49	TAYLOR, Marilou, "Long Island Sound," Audio Video Interiors, April 2000, 8 pages.	
	50	TOA Corporation, Digital Processor DP-0206 DACsys2000 Version 2.00 Software Instruction Manual, Copyright 2001, 67 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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.

Electronic Acknowledgement Receipt

EFS ID:	35369819
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:41:53
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	Non Patent Literature	EXHIBIT4_AMENDED_INVALIDITY_CHARTS_8938312_PATENT-.PDF	4670255 81c6a92ce0b754d5a48c712c3ce25d8dfad95f49	no	229
Warnings:					

Information:					
2	Non Patent Literature	EXHIBIT5_AMENDED_INVALIDITY_CHARTS_8938637_PATENT-.PDF	697963 ade04bd6db99cb700ce467763740a6acd7ebe096	no	213
Warnings:					
Information:					
3	Non Patent Literature	EXHIBIT6_AMENDED_INVALIDITY_CHARTS_9042556_PATENT-.PDF	566752 5dcd07804be07e0a469c2675ddfc773fda7f34e7	no	162
Warnings:					
Information:					
4	Non Patent Literature	EXHIBIT7_AMENDED_INVALIDITY_CHARTS_9195258_PATENT-.PDF	1186146 0664d301fcf4b22fc849ffeabcf5ddcceef694b8	no	418
Warnings:					
Information:					
5	Non Patent Literature	EXHIBIT8_AMENDED_INVALIDITY_CHARTS_9202509_PATENT-.PDF	2303729 05584fc5a70ea3ac116f27c8c5fbec3043655ba9	no	331
Warnings:					
Information:					
6	Non Patent Literature	EXHIBIT9_AMENDED_INVALIDITY_CHARTS_9213357_PATENT-.PDF	723000 12901d011e27ba6b805ed4a6444783c27bd641ba	no	251
Warnings:					
Information:					
7	Non Patent Literature	EXHIBIT1_INVALIDITY_CHARTS_7571014_PATENT.PDF	2607264 8751e5f3764f8105451e474cb5de38d0fe3abb8b	no	161
Warnings:					
Information:					
8	Non Patent Literature	EXHIBIT10_INVALIDITY_CHARTS_9213357_PATENT.PDF	668230 61349338775fde63b78a0c0ae830b3024f7f0f8e	no	244
Warnings:					
Information:					

9	Non Patent Literature	EXHIBIT11_INVALIDITY_CHARTS_9219959_PATENT.PDF	473213 9800aaafab4f6f0dc853ce124e5df09b1e95653f	no	172
Warnings:					
Information:					
10	Non Patent Literature	EXHIBIT12_INVALIDITY_CHARTS_D559197_DESIGN_PATENT.PDF	1577281 5894210a7e937ddecace4b8cd0250289d42cde6f	no	36
Warnings:					
Information:					
11	Non Patent Literature	EXHIBIT2_INVALIDITY_CHARTS_8588949_PATENT.PDF	809899 c5158b86f768606aa5afaa136e7d00e370a9defb	no	112
Warnings:					
Information:					
12	Non Patent Literature	EXHIBIT3_INVALIDITY_CHARTS_8843224_PATENT.PDF	1311414 5adfbbc0a9f7019a6a61b964791ca4ae5f58cab1	no	118
Warnings:					
Information:					
13	Non Patent Literature	EXHIBIT4_INVALIDITY_CHARTS_8938312_PATENT.PDF	5819446 9cd59f55b274b91512e789ff643ce2f1cebc4624	no	217
Warnings:					
Information:					
14	Non Patent Literature	EXHIBIT5_INVALIDITY_CHARTS_8938637_PATENT.PDF	555679 7f3f81d4d77f719a3ce00abb4a168a66c6e6ca0f	no	177
Warnings:					
Information:					
15	Non Patent Literature	EXHIBIT6_INVALIDITY_CHARTS_9042556_PATENT.PDF	350531 96e30229adf9725f4c9024f9c3bee1ba7d18e9e7	no	86
Warnings:					
Information:					

16	Non Patent Literature	EXHIBIT7_INVALIDITY_CHARTS_9130771_PATENT.PDF	2717755 c7ea26b13fc59fd94f2baee641a6edc5112ace81	no	203
Warnings:					
Information:					
17	Non Patent Literature	EXHIBIT8_INVALIDITY_CHARTS_9195258_PATENT.PDF	1047991 903f84197fa1f655802591d3fb1e9f9a13a5edd6	no	400
Warnings:					
Information:					
18	Non Patent Literature	EXHIBIT9_INVALIDITY_CHARTS_9202509_PATENT.PDF	739299 ea1358c10604cadbbe7a27db53a7129422cd8691	no	163
Warnings:					
Information:					
19	Non Patent Literature	PRELIMINARY_IDENTIFICATION_OF_PRIOR_ART_REFERENCES_7-29-2016.PDF	82819 4add8057fc931ee4f2e33b7b6eca95f4d16277e3	no	5
Warnings:					
Information:					
20	Non Patent Literature	DEFENDANTS_BRIEF_IN_SUPPORT_10-12-16-.PDF	262459 3a022330e79f6decf7f0854059b69b8c079e1e40	no	24
Warnings:					
Information:					
21	Non Patent Literature	DEFENDANTS_OPPOSITION_TO_SONOS_MOTION_TO_STRIKE_10-3-16-.PDF	241836 4a04c692f4446c75e6b4d3fe7df18bd654e99ca5	no	15
Warnings:					
Information:					
22	Non Patent Literature	EXHIBIT_A_DEFENDANTS_SECOND_AMENDED_ANSWER_10-12-2016-.PDF	205207 58a1bf313d6cfa29f58406b75452f22e72c918f8	no	43
Warnings:					
Information:					

23	Non Patent Literature	EXHIBIT_B_DEFENDANTS_SECOND_AMENDED_ANSWER_10-12-2016-.PDF	214180 64c9ae7bd0902f3239b69afef3a9114de5b83b68	no	43
Warnings:					
Information:					
24	Non Patent Literature	OPENING_BRIEF_8-1-16-.PDF	226573 beec3e4ce8c3e8ff4a4681061db68a40c9f4a795	no	11
Warnings:					
Information:					
25	Non Patent Literature	ORDER_10-7-16-.PDF	74064 d2f3ea2b3904fcf029ca3154461997729888 9185	no	2
Warnings:					
Information:					
26	Non Patent Literature	OPPOSITION_TO_MOTION_FOR_LEAVE_8-26-16-.PDF	228973 3a1723674bfa2d69cce051b2d020bba5ed0a81c9	no	25
Warnings:					
Information:					
27	Non Patent Literature	REDLINED_EXHIBIT_B_FIRST_AMENDED_ANSWER_TO_THIRD_AMENDED_COMPLAINT_8-1-16-.PDF	284998 4f7752b72d03ac60cf52af7a6da625b4468cb836	no	27
Warnings:					
Information:					
28	Non Patent Literature	SONOS_NO14-1330-RGA_DI_206-1_28PAGES.PDF	299059 9f2e542b1e6cf27946890f1b973e4007410a5651	no	28
Warnings:					
Information:					
29	Non Patent Literature	SONOS_NO14-1330-RGA_DI_207_88PAGES.PDF	716877 7d274830ede80d5fb9a3605ba8a096cd59484053	no	88
Warnings:					
Information:					

30	Non Patent Literature	SONOS_NO14-1330-RGA_DI_214_13PAGES.PDF	352204 6e67ee5dc45cb89a2e318ef60f4a63f3ad92d574	no	13
Warnings:					
Information:					
31	Non Patent Literature	SONOS_NO14-1330-RGA_DI_215_15PAGES.PDF	567248 c290b69f6305dc44f80440fed94b777361e2be92	no	15
Warnings:					
Information:					
32	Non Patent Literature	SONOS_NO14-1330-RGA_DI_219_24PAGES.PDF	2776630 6e9ad0abcc5d8aa7a33ade6c190ab8385284007e	no	24
Warnings:					
Information:					
33	Non Patent Literature	SONOS_NO14-1330-RGA_DI_221_2PAGES.PDF	239928 f575c7b7bccde54d1661be0f7701bf954ed3351b	no	2
Warnings:					
Information:					
34	Non Patent Literature	SONOS_NO14-1330-RGA_MARKMAN_TRANSCRIPT_69PAGES.PDF	370786 7694a1fe17066580b44b12e7e7b9b78215fccde7	no	69
Warnings:					
Information:					
35	Non Patent Literature	SONY_AIR-SA50R_2PAGES.PDF	101507 a2b9290f69850cd6876c4968c039170e238555d7	no	2
Warnings:					
Information:					
36	Non Patent Literature	SONY_ALTUS_QUICK_SETUP_GUIDE_2PAGES-V2.PDF	11117076 2ee078567e1e5c1dcffde18906711e6a59e47abd	no	2
Warnings:					
Information:					

37	Non Patent Literature	SONY_BD_DVD_HOME_THEATRE_OPERATING_INSTRUCTIONS_115PAGES-V2.PDF	25360373 187109710f25b3650a8713db276d157d7f47c1c1	no	115
Warnings:					
Information:					
38	Non Patent Literature	SONY_BD_DVD_HOME_THEATRE_OPERATING_INSTRUCTIONS_159PAGES-V2.PDF	10384396 ac3c053e137d1f8cfad5023b5fd28c7c2d9a1522	no	159
Warnings:					
Information:					
39	Non Patent Literature	SONY_BD_DVD_HOME_THEATRE_OPERATING_INSTRUCTIONS_88PAGES.PDF	9751979 b1c4f4680151a1a29e5d81df352d55734bf0815d	no	88
Warnings:					
Information:					
40	Non Patent Literature	SONY_DVD_HOME_THEATRE_OPERATING_INSTRUCTIONS_136PAGES.PDF	15128340 af4e49c92f35389a10308c972ebe25fd9c401aeb	no	136
Warnings:					
Information:					
41	Non Patent Literature	SONY_DVD_HOME_THEATRE_OPERATING_INSTRUCTIONS_128PAGES.PDF	14663878 92070242e2d894a2a6d68dfef577e9e7fb77c441	no	128
Warnings:					
Information:					
42	Non Patent Literature	SONY_ERICSSON_MS500_2PAGES-V2.PDF	7746280 e3b07d9af263bd1b142c8420c7aabd2c10957cd3	no	2
Warnings:					
Information:					
43	Non Patent Literature	SONY_HOME_THEATRE_OPERATING_INSTRUCTIONS_168PAGES.PDF	16887301 06602228f034d88122f03f39d9dab64ff231c0ec	no	168
Warnings:					
Information:					

44	Non Patent Literature	SONY_HT-IS100_2PAGES.PDF	165141 3753d7055d75b04bce066a1a32ea54c13fb9e608	no	2
Warnings:					
Information:					
45	Non Patent Literature	SONY_MULTI_CHANNEL_AV_2007.PDF	5849292 15f631e80cf8061b23bfd671fd0bf0cbedd2450a	no	80
Warnings:					
Information:					
46	Non Patent Literature	SONY_MULTI_CHANNEL_STR-DN100_136PAGES.PDF	15985931 c17a93f40c6db53ef8dfd112092526691 93df1e6	no	136
Warnings:					
Information:					
47	Non Patent Literature	SONY_STR-DN1000_2PAGES.PDF	193754 652b41249ea286435bc6bb8fe5f3c0cccef75b17	no	2
Warnings:					
Information:					
48	Non Patent Literature	SONY_WIRELESS_SURROUND_KIT_WHAT-SA2_56PAGES.PDF	4349085 8ee4c46d3e4da042de0df5e4a72ad67fe2a56528	no	56
Warnings:					
Information:					
49	Non Patent Literature	TAYLOR_LONG_ISLAND_SOUND_2000.PDF	8896602 3f31a142a0097593c1022cae7464fbf0fa574b99	no	8
Warnings:					
Information:					
50	Non Patent Literature	TOA_DP-0206_DACSYS2000_INSTRUCTION_MANUAL_67PAGES.PDF	4662842 b2c26110d9aab4d1c79884e95e5e90e896325502	no	67
Warnings:					
Information:					

51	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_4_IDS_20190306170447.pdf	1055033 7c1e15f112229141615a6dd9a99d539c9acd9b8f	no	8

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.

Total Files Size (in bytes):	188268498

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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	LOUDERBACK, Jim, "Affordable Audio Receiver Furnishes Homes With MP3," TechTV Vault. 28 June 2000 retrieved 10 July 2014, 2 pages.	
	2	MediaRenderer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	3	MediaServer:1 Device Template Version 1.01 For UPnP, Version 1.0 (June 25, 2002) (12 pages).	
	4	Microsoft, Universal Plug and Play (UPnP) Client Support ("Microsoft UPnP") (August 2001) (D+M_0402007-24) (18 pages).	
	5	Microsoft Window's XP Reviewer's Guide (August 2001) (D+M_0402225-85) (61 pages).	
	6	"Microsoft Windows XP File and Printer Share with Microsoft Windows" Microsoft Windows XP Technical Article, 2003, 65 pages.	
	7	"Model MRC44 Four Zone - Four Source Audio/Video Controller/Amplifier System," Xantech Corporation, 2002, 52 pages.	
	8	"SMPTE Made Simple: A Time Code Tutor by Timeline," 1996, 46 pages.	
	9	Network Time Protocol (NTP), RFC 1305 (Mar. 1992) (D+M_0397417-536) (120 pages).	
	10	"NexSys Software v.3 Manual," Crest Audio, Inc., 1997, 76 pages.	
	11	NIEDERST, JENNIFER "O'Reilly Web Design in a Nutshell," Second Edition, September 2001, 678 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/684927, filed 13 April 2015, 10 pages.	
	13	Non-Final Office Action mailed on 04 October 2016, issued in connection with U.S. Patent Application No. 14/813961, filed 30 July 2015, 10 pages.	
	14	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2014, 16 pages.	
	15	Non-Final Office Action mailed on 07 April 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 13 pages.	
	16	Non-Final Office Action mailed on 11 September 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 11 pages.	
	17	Non-Final Office Action mailed on 24 April 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 11 pages.	
	18	Non-Final Office Action mailed on 25 September 2013, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	19	Notice of Allowance mailed on 01 October 2014, issued in connection with U.S. Patent Application No. 13/089167, filed on 18 April 2011, 14 pages.	
	20	Notice of Allowance mailed on 10 April 2015, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 16 pages.	
	21	Notice of Allowance mailed on 16 February 2017, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	
	22	Notice of Allowance mailed on 18 August 2016, issued in connection with U.S. Patent Application No. 14/628999, filed on 23 February 2015, 7 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	Notice of Allowance mailed on 22 March 2017, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 7 pages.	
	24	Notice of Allowance mailed on 27 August 2018, issued in connection with U.S. Patent Application No. 15/583553, filed on 1 May 2017, 7 pages.	
	25	Notice of Allowance mailed on 28 June 2017, issued in connection with U.S. Patent Application No. 14/813961, filed on 30 July 2015, 7 pages.	
	26	Notice of Allowance mailed on 28 September 2016, issued in connection with U.S. Patent Application No. 14/561421, filed on 05 December 2015, 10 pages.	
	27	Notice of Allowance mailed on 30 June 2017, issued in connection with U.S. Patent Application No. 14/684927, filed on 13 April 2015, 8 pages.	
	28	Notice of Allowance mailed on 5 November 2018, issued in connection with U.S. Patent Application No. 15/688204, filed on 28 August 2017, 7 pages.	
	29	Notice of Incomplete Re-Exam Request mailed on 25 May 2017, issued in connection with U.S. Patent Application No. 90/013959 , filed on 01 April 2016, 10 pages.	
	30	Office Action in Ex Parte Reexamination mailed on 20 October 2017, issued in connection with U.S. Patent Reexamination Application No. 90/013959, filed on 16 June 2017, 50 pages.	
	31	Palm, Inc., "Handbook for the Palm VII Handheld," May 2000, 311 pages.	
	32	Parasound Zpre2 Zone Preamplifier with PTZI Remote Control, 2005, 16 pages.	
	33	PILLAI et al., "A Method to Improve the Robustness of MPEG Video Applications over Wireless Networks," Kent Ridge Digital Labs, 2000, 15 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Presentations at WinHEC 2000, May 2000, 138 pages.	
	35	Proficient Audio Systems M6 Quick Start Guide, 2011, 5 pages.	
	36	Proficient Audio Systems: Proficient Editor Advanced Programming Guide, 2007, 40 pages.	
	37	Programming Interface for WL54040 Dual-Band Wireless Transceiver, AVAGO0066, Agere Systems, May 2004, 16 pages.	
	38	Radio Shack, "Auto-Sensing 4-Way Audio/Video Selector Switch," 2004, 1 page.	
	39	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 1, 100 pages.	
	40	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 2, 100 pages.	
	41	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 3, 100 pages.	
	42	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 4, 100 pages.	
	43	RadioShack, Pro-2053 Scanner, 2002 Catalog, part 5, 46 pages.	
	44	RANGAN et al., "Feedback Techniques for Continuity and Synchronization in Multimedia Information Retrieval," ACM Transactions on Information Systems, 1995, pp. 145-176, Vol. 13, No. 2.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Real Time Control Protocol (RTCP) and Realtime Transfer Protocol (RTP), RFC 1889 (Jan. 1996) (D+M_0397810-84) (75 pages).	
	46	Realtime Streaming Protocol (RTSP), RFC 2326 (Apr. 1998) (D+M_0397945-8036) (92 pages).	
	47	Realtime Transport Protocol (RTP), RFC 3550 (July 2003) (D+M_0398235-323) (89 pages).	
	48	REID, Mark, "Multimedia conferencing over ISDN and IP networks using ITU-T H-series recommendations: architecture, control and coordination," Computer Networks, 1999, pp. 225-235, Vol. 31.	
	49	RenderingControl:1 Service Template Version 1.01 For UPnP, Version 1.0, (June 25, 2002) (SONDM000115187-249) (63 pages).	
	50	Renewed Request for Ex Parte Re-Examination, U.S. Application No. 90/013959 filed 16 June 2017, 126 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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.

Electronic Acknowledgement Receipt

EFS ID:	35365097
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:36:57
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	Non Patent Literature	LOUDERBACK_2000.PDF	82505 401ceed7630aa3dc4edcf829b55770d9f673c17f	no	2
Warnings:					

Information:					
2	Non Patent Literature	MEDIARENDERER_1_2002_12PAGES.PDF	314359 1c7959498a37654aae2ed1b35a5e50d8542cbe9f	no	12
Warnings:					
Information:					
3	Non Patent Literature	MEDIASERVER_2002_12PAGES.PDF	325151 ed2a3d0adb5d617bf15be8b107dd791ecfc6a266	no	12
Warnings:					
Information:					
4	Non Patent Literature	MICROSOFT_UNIVERSAL_PLUG_AND_PLAY_DM_0402007-24_18PAGES.PDF	8990496 19c966682469 1f55156ab318725527384d0d79cf	no	18
Warnings:					
Information:					
5	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART1.PDF	18506638 dd4b0688f6be457f3109865418be53d77684650d	no	10
Warnings:					
Information:					
6	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART2.PDF	24811494 d946404e54742cc85dfcab70f7f0c4d8227f1b94	no	10
Warnings:					
Information:					
7	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART3.PDF	20456310 eeb8bdb7eaeeddb5104825f80697c6d7380ab779	no	10
Warnings:					
Information:					
8	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART4.PDF	23455812 7f103bb5c53a7a1b0117035ea3c2f2baae3932fb	no	10
Warnings:					
Information:					

9	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART5.PDF	18816327 b7e09cf675982370f73b214306c787cb6ece271b	no	10
Warnings:					
Information:					
10	Non Patent Literature	MICROSOFT_WINDOWS_XP_REVIEWERS_GUIDE_DM_0402225-85_61PAGES_PART6.PDF	16028477 088845aa2e1533f1abf4927423ecb2588d6abd98	no	11
Warnings:					
Information:					
11	Non Patent Literature	MICROSOFT_WINDOWS_FILE_AND_PRINTER_SHARE_NOV2003_65PAGES.PDF	5516100 19593193f4a86aac2fc42da33e516cf584afb293	no	65
Warnings:					
Information:					
12	Non Patent Literature	MRC44_FOUR_ZONE.PDF	16084736 ec4982b2ff224de138570e8c6d3bf25ab00e3e8a	no	52
Warnings:					
Information:					
13	Non Patent Literature	SMPTE_MADE_SIMPLE_TIMELINE_46PAGES.PDF	3022054 2a88cd7c1d356ad7add38a86fa6364256ed9e6ca	no	46
Warnings:					
Information:					
14	Non Patent Literature	NETWORK_TIME_PROTOCOL_DM_0397417-536_120PAGES_PART1.PDF	12964521 f2f7a78a57b5eaea2f0587b97f4f6915af387ca9	no	60
Warnings:					
Information:					
15	Non Patent Literature	NETWORK_TIME_PROTOCOL_DM_0397417-536_120PAGES_PART2.PDF	12684304 34c64ea88c1b1967f97c23c716a2e7d16654235f	no	60
Warnings:					
Information:					

16	Non Patent Literature	NEXSYS_SOFTWAREMANUAL.PDF	7692260 26268f59601b6550c4863f3554c99f63b6d3af69	no	76
Warnings:					
Information:					
17	Non Patent Literature	WEBDESIGN_IN_A_NUTSHELL_678PAGES_PART1OF2.PDF	7695780 18f5a3aab078bc1da1312108592fb28d2afd46c8	no	300
Warnings:					
Information:					
18	Non Patent Literature	WEBDESIGN_IN_A_NUTSHELL_678PAGES_PART2OF2.PDF	9565059 079a8c5632904800d67208ffd06cc7ebcff9182b	no	378
Warnings:					
Information:					
19	Non Patent Literature	14684927_NON-FINAL_OA_10-4-16.PDF	343945 938195a67b7ae1c1eb16c1a0cad08786b389e70c	no	10
Warnings:					
Information:					
20	Non Patent Literature	14813961_NON-FINAL_OA_10-4-16.PDF	327738 246d03f02e64a53d4455e84d59039d9ca5c3b14c	no	10
Warnings:					
Information:					
21	Non Patent Literature	14561421_OA_04-07-2016.PDF	545825 765673ae403e1d78ad7148eaff1d32d7b9c7a8fc	no	16
Warnings:					
Information:					
22	Non Patent Literature	14628999_OA_04-07-2016.PDF	451034 b9556ed154143f914b709a9748aea484badec5d9	no	13
Warnings:					
Information:					

23	Non Patent Literature	13186249_NON-FINAL_OA_9-11-14.PDF	384799 f829005324 60ab52dad9e0a3bb7b5bfed5a6fb1e	no	11
Warnings:					
Information:					
24	Non Patent Literature	13089167_NON-FINAL_OA_4-24-14.PDF	377982 32052c20f739f5097591531bb8e6050e94d20d42	no	11
Warnings:					
Information:					
25	Non Patent Literature	13186249_NON-FINAL_OA_9-25-13.PDF	398906 b8615d8bcc8050aa1cfd4679de47fefb22bfb316	no	12
Warnings:					
Information:					
26	Non Patent Literature	13089167_NOA_10-01-14.PDF	616713 51d6574a2f45820f06eb299d9df2dda376db7a45	no	14
Warnings:					
Information:					
27	Non Patent Literature	13186249_NOA_4-10-15.PDF	757378 cfd9627be8d48ecbbaf4d9683b940c7ba2bb19c2	no	16
Warnings:					
Information:					
28	Non Patent Literature	14628999_NOA_02-16-2017.PDF	416906 7cc0aa153809ccb3487690a7a428004b376e3347	no	7
Warnings:					
Information:					
29	Non Patent Literature	14628999_NOA_8-18-16.PDF	484131 63ed9847c3267db7def8b5b72565cae872a6bffc	no	7
Warnings:					
Information:					

30	Non Patent Literature	14561421_NOA_3-22-17.PDF	390636 b4ad29f79845a22183d21fd2327a2bb62010787a	no	7
Warnings:					
Information:					
31	Non Patent Literature	15583553_NOA_11-0403-CON0417_8-27-18_7PAGES.PDF	403718 bc6634f3908482d3f8e379c051c636a9bdaf955e	no	7
Warnings:					
Information:					
32	Non Patent Literature	14813961_NOA_11-0501_CON0715_6-28-17_7PAGES.PDF	415665 4138c8582cf514d595416f77b28d2d7afebfec44	no	7
Warnings:					
Information:					
33	Non Patent Literature	14561421_NOA_09-28-2016.PDF	511565 d0051416002fe50cc2a26d1b0197ab73d202d70d	no	10
Warnings:					
Information:					
34	Non Patent Literature	14684927_NOA_11-0501-CON0315_6-30-17_8PAGES.PDF	420245 b880a9b09d8983546d4fce0f01faa6d2402a4fce	no	8
Warnings:					
Information:					
35	Non Patent Literature	15688204_NOA_11-0501-CON0817_11-05-18_7PAGES.PDF	419153 23902a4537c7296031971389b1388ba4adfd4535	no	7
Warnings:					
Information:					
36	Non Patent Literature	90013959-NOTICEOFINCOMPLETEREEXAMREQUEST-05-25-17_10PAGES.PDF	517179 d1a56fbcbf42a638a85bce98f2d889dce897edb0	no	10
Warnings:					
Information:					

37	Non Patent Literature	90013959_NFOA_04-0401-REEXAM_10-20-17_50PAGES.PDF	1959821 bda6577119863329c0d733a048a5a01466fcb868	no	50
Warnings:					
Information:					
38	Non Patent Literature	PALM_HANDBOOK_FOR_PALM_VII_MAY2000.PDF	8648017 cb981d3822d2c4b4fd36cee5a8aa25c80d4e492c	no	311
Warnings:					
Information:					
39	Non Patent Literature	PARASOUND_ZPRE2_PREAMPLIFIER.PDF	2514602 b5c364499fb3c440e0d34da20e4588207ad844d6	no	16
Warnings:					
Information:					
40	Non Patent Literature	PILLAI_2000.PDF	19191171 c12afd77d4f4b3e20ce8ab2bdc287c65bb134532	no	15
Warnings:					
Information:					
41	Non Patent Literature	WINHEC_2000_SLIDE_DECK-V2.PDF	1248714 339655ffe3a6651c50d13433400e8a6a9c3ffd4f	no	138
Warnings:					
Information:					
42	Non Patent Literature	PROFICIENT_AUDIO_SYSTEMS_M6_GUIDE_2011_5PAGES.PDF	441703 b8ba32c27817c2a7347d37b4fba91fb9198d0367	no	5
Warnings:					
Information:					
43	Non Patent Literature	PROFICIENT_EDITOR_ADV_PROG_GUIDE.PDF	4141990 7cdb5619cf1d74063ad7dc47aa45fb7dd16664bf	no	40
Warnings:					
Information:					

44	Non Patent Literature	PROGRAMMING_INTERFACE_AVAGO0066_V2.PDF	2024854 83ae38b8895183cb7f9d80aeffeb1601fb0f30da	no	16
Warnings:					
Information:					
45	Non Patent Literature	RADIO_SHACK_AUTO-SENSING_4-WAY.PDF	2533563 604fea401867f154b60e8fc9994491921aec9486	no	1
Warnings:					
Information:					
46	Non Patent Literature	RADIOSHACK_2002CATALOG_PART_1.PDF	25579162 49b376f1e09d92ccf50ad3b9db42c50ca11fb76f	no	100
Warnings:					
Information:					
47	Non Patent Literature	RADIOSHACK_2002CATALOG_PART_2.PDF	23479886 0260c954c526e2dfe4db2d57d3b199b7c782b97d	no	100
Warnings:					
Information:					
48	Non Patent Literature	RADIOSHACK_2002CATALOG_PART_3.PDF	21929178 d7622f6094f8f09e37a614f3753cbd9c95e3aa31	no	100
Warnings:					
Information:					
49	Non Patent Literature	RADIOSHACK_2002CATALOG_PART_4.PDF	21859971 52f31b6b857f31aee8e418d346895abd995837ef	no	100
Warnings:					
Information:					
50	Non Patent Literature	RADIOSHACK_2002CATALOG_PART_5.PDF	10846226 e383aa65d8811f0a6b5b8cc9ebad7a0f3ef53953	no	46
Warnings:					
Information:					

51	Non Patent Literature	RANGAN_1995.PDF	1885764 2133a040a8650920cb6175dd16a21ef0d0a34604	no	33
Warnings:					
Information:					
52	Non Patent Literature	REALTIME_CONTROL_PROTOCOL_DM_0397810-84_75PAGES.PDF	10808098 a7f179b202a03547f14f9486976e1b11dce029f7	no	75
Warnings:					
Information:					
53	Non Patent Literature	REALTIME_STREAMING_PROTOCOL_DM_0397945-8036_92PAGES.PDF	11501792 00382063e8484428d1e08d8f73efb1d13a7c7716	no	92
Warnings:					
Information:					
54	Non Patent Literature	REALTIME_TRANSPORT_DM_0398235-323_89PAGES.PDF	18673787 970e9cead4b0255ac164cb5a07a78b1272156d17	no	89
Warnings:					
Information:					
55	Non Patent Literature	REID_1999.PDF	15953363 e452788f73780d08a4b153930452b55325af56cd	no	11
Warnings:					
Information:					
56	Non Patent Literature	RENDERINGCONTROL_SONDM000115187-249_63PAGES_PART1.PDF	22370350 95b0a506e477f3fd47e6926a4e76024368f3609b	no	30
Warnings:					
Information:					
57	Non Patent Literature	90013959_RENEWED_REQUEST_FOR_EX-PARTE_REEXAM_6-16-17_126PAGESPDF.PDF	12756767 3bfd840b1d821bbd920c20ca99bc2bff73ac1d91	no	126
Warnings:					
Information:					

58	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_2_IDS_20190306170447.pdf	1055598 6cbb08063e2082210c04139fe3ae04b45925eabf	no	8

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.

59	Non Patent Literature	RENDERINGCONTROL_SONDM000115187-249_63PAGES_PART2.PDF	19704282 1718011c92bb453429a4c61221bcde32c32ba638	no	33

Warnings:

Information:

Total Files Size (in bytes):	476304560

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.

<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.

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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					

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					

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							

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	'Residential Distributed Audio Wiring Practices," Leviton Network Solutions, 2001, 13 pages.	
	2	'Response to the Written Opinion of the International Searching Authority," issued in connection with European Patent Application No. 12717999.2, dated June 30, 2014, 9 pages.	
	3	ROLAND CORPORATION, "Roland announces BA-55 Portable PA System," press release, April 6, 2011, 2 pages.	
	4	ROTHERMEL et al., "An Adaptive Protocol for Synchronizing Media Streams," Institute of Parallel and Distributed High-Performance Systems (IPVR), 1997, 26 pages.	
	5	ROTHERMEL et al., "An Adaptive Stream Synchronization Protocol," 5th International Workshop on Network and Operating System Support for Digital Audio and Video, April 18-21, 1995, 12 pages.	
	6	ROTHERMEL et al., "Clock Hierarchies- An Abstraction for Grouping and Controlling Media Streams," University of Stuttgart Institute of Parallel and Distributed High-Performance Systems, January 1996, 23 pages.	
	7	ROTHERMEL et al., "Synchronization in Joint-Viewing Environments," University of Stuttgart Institute of Parallel and Distributed High-Performance Systems, 1992, 13 pages.	
	8	ROTHERMEL, Kurt, "State-of-the-Art and Future Research in Stream Synchronization," University of Stuttgart, 3 pages.	
	9	'RVL-6 Modular Multi-Room Controller, Installation & Operation Guide," Nile Audio Corporations, 1999, 46 pages.	
	10	Simple Network Time Protocol (SNTPI), RFC 1361 (August 1992) (D+M_0397537-46) (10 pages).	
	11	Simple Network Time Protocol (SNTPII), RFC 1769 (March 1995) (D+M_0397663-76) (14 pages).	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	Simple Service Discovery Protocol/1.0 Operating without an Arbiter (Oct. 28, 1999) (24 pages).	
	13	Sonos, Inc. v D&M Holdings, D&M Supp Opposition Brief including Exhibits, 17 March 2017, 23 pages.	
	14	Sonos, Inc. v. D&M Holdings, Expert Report of Jay P. Kesan including Appendices A-P, Feb. 20, 2017, 776 pages.	
	15	Sonos, Inc. v. D&M Holdings Inc. et al., Complaint for Patent Infringement, filed October 21, 2014, 20 pages.	
	16	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions, filed September 14, 2016, 100 pages.	
	17	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Initial Invalidity Contentions, filed April 15, 2016, 97 pages.	
	18	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Preliminary Identification of Indefinite Terms, provided July 29, 2016, 8 pages.	
	19	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' 35 U.S.C. § 282 Notice filed November 2, 2017, 31 pages.	
	20	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Amended Answer, Defenses, and Counterclaims for Patent Infringement, filed November 30, 2015, 47 pages.	
	21	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Answer to Plaintiff's Second Amended Complaint, filed April 30, 2015, 19 pages.	
	22	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, filed September 7, 2016, 23 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Notice of Third-Party Subpoena to Core Brands, LLC, March 18, 2016, 100 pages.	
	24	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Notice of Third-Party Subpoena to Parasound Products, Inc., March 18, 2016, 67 pages.	
	25	Sonos, Inc. v. D&M Holdings Inc. et al., Defendants' Reply in Support of Partial Motion for Judgment on the Pleadings, filed June 10, 2016, 15 pages.	
	26	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' First Amended Answer to Plaintiffs' Third Amended Complaint, provided August 1, 2016, 26 pages.	
	27	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, filed September 9, 2016, 43 pages.	
	28	Sonos, Inc. v. D&M Holdings Inc. et al., Exhibit A: Defendants' Second Amended Answer to Plaintiffs' Third Amended Complaint, provided September 9, 2016, 88 pages.	
	29	Sonos, Inc. v. D&M Holdings Inc. et al., First Amended Complaint for Patent Infringement, filed December 17, 2014, 26 pages.	
	30	Sonos, Inc. v. D&M Holdings Inc. et al., Joint Claim Construction Chart, Volume 1 of 3 with Exhibits A-O, filed August 17, 2016, 30 pages.	
	31	Sonos, Inc. v. D&M Holdings Inc. et al., Opening Brief in Support of Defendants' Partial Motion for Judgment on the Pleadings for Lack of Patent-Eligible Subject Matter, filed May 6, 2016, 27 pages.	
	32	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff Sonos, Inc.'s Opening Claim Construction Brief, filed September 9, 2016, 26 pages.	
	33	Sonos, Inc. v. D&M Holdings Inc. et al., Plaintiff Sonos, Inc.'s Response in Opposition to Defendants' Partial Motion for Judgment on the Pleadings, filed May 27, 2016, 24 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	Sonos, Inc. v. D&M Holdings Inc. et al., Reply Brief in Support of Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided November 10, 2016, 16 pages.	
	35	Sonos, Inc. v. D&M Holdings Inc. et al., Reply Brief in Support of Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided September 9, 2016, 16 pages.	
	36	Sonos, Inc. v. D&M Holdings Inc. et al., Second Amended Complaint for Patent Infringement, filed February 27, 2015, 49 pages.	
	37	Sonos, Inc. v. D&M Holdings Inc. et al., Sonos's Motion to Strike Defendants' New Amended Answer Submitted with their Reply Brief, provided September 15, 2016, 10 pages.	
	38	Sonos, Inc. v. D&M Holdings Inc. et al., Sonos's Opposition to Defendants' Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct, provided October 31, 2016, 26 pages.	
	39	Sonos, Inc. v. D&M Holdings Inc. et al., Third Amended Complaint for Patent Infringement, filed January 29, 2016, 47 pages.	
	40	Sonos, Inc. v. D&M Holdings, Inc. (No. 14-1330-RGA), Defendants' Final Invalidity Contentions (Jan. 18, 2017) (106 pages).	
	41	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 226, Opinion Denying Inequitable Conduct Defenses, Feb. 6, 2017, updated, 5 pages.	
	42	Sonos, Inc. v. D&M Holdings (No. 14-1330-RGA), DI 242, US District Judge Andrews 101 Opinion, Mar. 13, 2017, 16 pages.	
	43	Sonos, Inc. v D&M Holdings, Sonos Supp Opening Markman Brief including Exhibits, 3 March 2017, 17 pages.	
	44	Sonos, Inc. v. D&M Holdings, Sonos Supp Reply Markman Brief including Exhibits, 29 March 2017, 36 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	Sonos, Inc. v. D&M Holdings Inc. et al., Declaration of Steven C. Visser, executed September 9, 2016, 40 pages.	
	46	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 1: Defendants' Invalidity Contentions for U.S. Patent No. 7,571,014 filed September 16, 2016, 270 pages.	
	47	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 10: Defendants' Invalidity Contentions for U.S. Patent No. 9,219,959 filed September 27, 2016, 236 pages.	
	48	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 11: Defendants' Invalidity Contentions for U.S. Design Patent No. D559,197 filed September 27, 2016, 52 pages.	
	49	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 2: Defendants' Invalidity Contentions for U.S. Patent No. 8,588,949 filed September 27, 2016, 224 pages.	
	50	Sonos, Inc. v. D&M Holdings Inc. et al., Defendant's Amended Invalidity Contentions Exhibit 3: Defendants' Invalidity Contentions for U.S. Patent No. 8,843,224 filed September 27, 2016, 147 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.

[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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58644

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.

Electronic Acknowledgement Receipt	
EFS ID:	35368314
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:39:33
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	LEVITON_RESIDENTIAL_DISTRIBUTED_2001.PDF	9322418 a111fe6e0c5f88448855ec4023a2d4e7aba6938e	no	13

Warnings:

Information:					
2	Non Patent Literature	127179992_RESPONSE_TO_WO_6-30-14-V2.PDF	423746 e7b30276a43eaad0c02428a56b40e91c56ccc950	no	9
Warnings:					
Information:					
3	Non Patent Literature	ROLAND_ANNOUNCES_BA-55_SYSTEM_2011-2PAGES-V2.PDF	79061 ef1329059c0485858454518ac822db84467f8de2	no	2
Warnings:					
Information:					
4	Non Patent Literature	ROTHERMEL_1997.PDF	6385230 b89e3b45c6d27fc1112b421bfc52f69ef8a01cf9	no	26
Warnings:					
Information:					
5	Non Patent Literature	ROTHERMEL_1995.PDF	16064216 0ac6e2db1ebe6021aa90018bcbab0bf22d7a8260	no	12
Warnings:					
Information:					
6	Non Patent Literature	ROTHERMEL_CLOCKHIERARCHIES_23PAGES.PDF	78220 a6e31f12d2f8cfce12cb470f2b99b662037e1e55	no	23
Warnings:					
Information:					
7	Non Patent Literature	ROTHERMEL_1992.PDF	19798637 fee9878f60457fc7abcb04ee318b63c1c7dffb73	no	13
Warnings:					
Information:					
8	Non Patent Literature	ROTHERMEL_STATE_OF_ART_3PAGES.PDF	1013152 3371105e4474c4bf7c7c3c42bad2ca9151510d5a	no	3
Warnings:					
Information:					

9	Non Patent Literature	RVL-6_MODULAR_1999.PDF	2801763 f5f6bfc67cf54ebfac01bc9e7925ab17ff777b98	no	46
Warnings:					
Information:					
10	Non Patent Literature	SIMPLE_NETWORK_TIME_PROTOCOL_SNTPI_DM_0397537-46_10PAGES.PDF	1304386 e1bb0ef63b2a1e32160157535e94dde433da0b36	no	10
Warnings:					
Information:					
11	Non Patent Literature	SIMPLE_NETWORK_TIME_PROTOCOL_SNTPII_DM_0397663-76_14PAGES.PDF	1912668 71a466552a1f5f7ec535c943864340aad46469a5	no	14
Warnings:					
Information:					
12	Non Patent Literature	SIMPLE_SERVICE_DISCOVERY_PROTOCOL_1999_24PAGES.PDF	58504 acb0377e0f99322881679643fdd6b6802aa4d6d4	no	24
Warnings:					
Information:					
13	Non Patent Literature	SONOS_V_DM_SUPP_OPPOSITION_BRIEF_INCLUDING_EXHIBITS_17MARCH2017_23PAGES-V2.PDF	1056821 c3f7de769b54eb0fd2deabbad9eaad9545a4bf26	no	23
Warnings:					
Information:					
14	Non Patent Literature	SONOSVDM_EXPERT_REPORT-KESAN-776_PAGES.PDF	17280627 0947216a0036b40ab9b5312f78b259453463962d	no	776
Warnings:					
Information:					
15	Non Patent Literature	COMPLAINT_10-21-2014-V2.PDF	250649 47f39c309351cca44580b07edd5d687fce610f76	no	20
Warnings:					
Information:					

16	Non Patent Literature	DEFENDANTS_AMENDED_INVALIDITY_CONTENTIONS_9-14-2016-V2.PDF	748641 b8fa07886128ee9b3d80033c1c077e6b25eb1f00	no	100
Warnings:					
Information:					
17	Non Patent Literature	DEFENDANTS_INITIAL_INVALIDITY_CONTENTIONS_4-15-2016-V2.PDF	522391 e5d7101cab43f6a21e302e7ab4d07aa2b70d82ae	no	97
Warnings:					
Information:					
18	Non Patent Literature	PRELIMINARY_IDENTIFICATION_OF_INDEFINITE_TERMS_7-29-2016-V2.PDF	89788 bebe26a56c55495fe4c966fe7ef145f07c8d4a86	no	8
Warnings:					
Information:					
19	Non Patent Literature	DEFENDANTS_35_USC_282_NOTICE_FILED_11-02-17_31PAGES.PDF	571707 cc4a664e2fc8b833b83589d4080f649781809ee4	no	31
Warnings:					
Information:					
20	Non Patent Literature	AMENDED_ANSWER_11-30-2015-V2.PDF	2629813 88d49d49e4eba6352e6e25a3b6d1a42c879fcb53	no	47
Warnings:					
Information:					
21	Non Patent Literature	ANSWER_4-30-2015-V2.PDF	199384 0361641a998b8b2cde6206a700f4a1cd8085dad3	no	19
Warnings:					
Information:					
22	Non Patent Literature	AMENDED_ANSWER_TO_3RD_AMENDED_COMPLAINT_9-7-2016-V2.PDF	207069 c84d8e50148bfb95e8943a867ab92601bed5070e	no	23
Warnings:					
Information:					

23	Non Patent Literature	SUBPOENA_TO_CORE_BRANDS-V2.PDF	23847595 3cfdaf13e8e08b63420113a7a8915a583f556047	no	100
Warnings:					
Information:					
24	Non Patent Literature	SUBPOENA_TO_PARASOUND-V2.PDF	7051612 107a9378dce5515c4083860619dcb5642c785b91	no	67
Warnings:					
Information:					
25	Non Patent Literature	DEFENDANTS_REPLY_BRIEF_6-10-2016-V2.PDF	211016 3906e1484a201cf1a28247a57984ff91b74bc069	no	15
Warnings:					
Information:					
26	Non Patent Literature	SONOSVDM_EXHIBIT_A_DEFENDANTS_FIRST_AMENDED_ANSWER_TO_THIRD_AMENDED_COMPLAINT_8-1-16.PDF	423431 bc2246e688f8079633e75204634688809d9083e09	no	26
Warnings:					
Information:					
27	Non Patent Literature	SECOND_AMENDED_ANSWER_TO_3RD_AMENDED_COMPLAINT_9-9-2016-V2.PDF	289199 1147bf3988f0a2404033ae8e7cb8ffaaec32d6c8	no	43
Warnings:					
Information:					
28	Non Patent Literature	SONOSVDM_EXHIBIT_A_DEFENDANTS_SECOND_AMENDED_ANSWER_9-9-16-V2.PDF	553438 18622215e033ec1ac7af50a073346b6482b080d1	no	88
Warnings:					
Information:					
29	Non Patent Literature	FIRST_AMENDED_COMPLAINT_12-17-2014-V2.PDF	255080 28d5712b18881fbffa846135310fb86e62beb2ee	no	26
Warnings:					
Information:					

30	Non Patent Literature	JOINT_CLAIM_CONSTRUCTION_CHART_8-17-2016-V2.PDF	510276 98331fb0469edee1c5ba729482f081c992bfdb1a	no	30
Warnings:					
Information:					
31	Non Patent Literature	OPENING_BRIEF_5-6-2016-V2.PDF	320071 42b9559807d00e504e9cc0cb9ea19dab37b9d609	no	27
Warnings:					
Information:					
32	Non Patent Literature	SONOS_OPENING_BRIEF_9-9-2016-V2.PDF	288635 b965c0d9cf55b0c1dcfeff1e85bcdcb4d145d49c	no	26
Warnings:					
Information:					
33	Non Patent Literature	SONOS_RESPONSE_OPPOSITION_MOTION_5-27-2016-V2.PDF	403985 489a4ade23cc5e5a70a73c1f66d423adba44c37d	no	24
Warnings:					
Information:					
34	Non Patent Literature	REPLY_BRIEF_11-10-2016-16PAGES.PDF	200331 c643aff52a2393a776ef56a3be6fb57d0702db97	no	16
Warnings:					
Information:					
35	Non Patent Literature	REPLY_BRIEF_9-9-2016-16PAGES.PDF	152851 472a37edf435f147843ac9db02deda3a0177c314	no	16
Warnings:					
Information:					
36	Non Patent Literature	SECOND_AMENDED_COMPLAINT_2-27-2015-V2.PDF	374504 47978ec4e533fba553c18435bd8a11fe31978ff1	no	49
Warnings:					
Information:					

37	Non Patent Literature	SONOS_MOTION_TO_STRIKE_9-15-16-V2.PDF	158622 6c5a71d3f8d93018cd6b526610de34b4f2f93b13	no	10
Warnings:					
Information:					
38	Non Patent Literature	SONOSVDM-OPPOSITION_TO_DEFENDANTS_MOTION_FOR_LEAVE_10-31-16_26PAGES.PDF	255142 4dade7291e973707e35732b998ababd913eb3081	no	26
Warnings:					
Information:					
39	Non Patent Literature	THIRD_AMENDED_COMPLAINT_1-29-2016-V2.PDF	444586 d3fefaf1e0f4c26e2dda33a12dea189e86b9c52f	no	47
Warnings:					
Information:					
40	Non Patent Literature	SONOSVDM_DEFENDANTS_FINAL_INVALIDITY_CONTENTIONS-106PAGES.PDF	8780098 4512326dc3cf73c7f7459a70bfb3f2fe220b2800	no	106
Warnings:					
Information:					
41	Non Patent Literature	SONOSVDM_DI_226_OPINION_DENYING_INEQUITABLE_CONDUCT-UPDATED_5_PAGES.PDF	724324 3f02345b7b2f06b9e45aa1015a18195b4607e521	no	5
Warnings:					
Information:					
42	Non Patent Literature	SONOSVDM_DI_242_ANDREWS_101_OPINION.PDF	2351389 82e684ae9517b90c48e69ed0fc09299e7355b2f4	no	16
Warnings:					
Information:					
43	Non Patent Literature	SONOS_V_DM_SUPP_OPENING_MARKMAN_BRIEF_INCLUDING_EXHIBITS_03MARCH2017_17PAGES-V2.PDF	545956 3d0a4a917320ef82f4f4a2d7709ac35752f1d328	no	17
Warnings:					
Information:					

44	Non Patent Literature	SONOSVDM_SONOS_SUPP_REPLY_MARKHAM-36_PAGES.PDF	5088392 0d622dd93687230fa6aa2cd451889a4035e417ab	no	36
Warnings:					
Information:					
45	Non Patent Literature	DECLARATION_VISSER_9-9-2016.PDF	649129 b7aa741947f051aaee74564807017a31d1010189	no	40
Warnings:					
Information:					
46	Non Patent Literature	EXHIBIT1_AMENDED_INVALIDITY_CHARTS_7571014_PATENT-.PDF	3002889 0449bb41f4c2fb8b85d7909b0b8be2308f1fb90c	no	270
Warnings:					
Information:					
47	Non Patent Literature	EXHIBIT10_AMENDED_INVALIDITY_CHARTS_9219959_PATENT-.PDF	1283154 974c2f866cf1dd61135ac344046abe036e6f3e29	no	236
Warnings:					
Information:					
48	Non Patent Literature	EXHIBIT11_AMENDED_INVALIDITY_CHARTS_D559197_PATENT-.PDF	1259583 77d9f9dee903939b96330e9c965c346a37bedade	no	52
Warnings:					
Information:					
49	Non Patent Literature	EXHIBIT2_AMENDED_INVALIDITY_CHARTS_8588949_PATENT-.PDF	1456593 3a0331c5a27c41f1427f36b2044018437bf822bb	no	224
Warnings:					
Information:					
50	Non Patent Literature	EXHIBIT3_AMENDED_INVALIDITY_CHARTS_8843224_PATENT-.PDF	1829334 c2f43b47f7fe7663cfabc4dc0d5de190911a0542	no	147
Warnings:					
Information:					

51	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_3_IDS_20190306170447.pdf	1055637 f285d7718bc9aff604a7f5067b03c246a299a51d	no	8

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.

Total Files Size (in bytes):	146565743

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.

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	8275307		2012-09-25	DOYLE; Marquis D. et al.	
	2	8290185		2012-10-16	KIM; Jong-Bae	
	3	8306235		2012-11-06	MAHOWALD; Peter H.	
	4	8311226		2012-11-13	LORGEOUX; Mickael et al.	
	5	8325935		2012-12-04	RUTSCHMAN; Phillip	
	6	8331585		2012-12-11	HAGEN; Roar et al.	
	7	8345891		2013-01-01	JAKES; Philip John et al.	
	8	8374595		2013-02-12	CHIEN; Chih-Ling et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	9	8391501		2013-03-05	KHAWAND; Charbel et al.	
	10	8411883		2013-04-02	MATSUMOTO; Keishi	
	11	8423893		2013-04-16	RAMSAY; Max Gordon et al.	
	12	8442239		2013-05-14	BRUELLE-DREWS CHRISTIAN . et al.	
	13	8452020		2013-05-28	GREGG; Justin et al.	
	14	8472633		2013-06-25	KRANTZ; Anton W. et al.	
	15	8477958		2013-07-02	MOELLER; Klaus R. et al.	
	16	8483853		2013-07-09	LAMBOURNE; Robert A [Us] et al.	
	17	8521316		2013-08-27	LOUBOUTIN; Sylvain Rene Yves	
	18	8565455		2013-10-22	WORRELL; Devon et al.	
	19	8577045		2013-11-05	GIBBS; Jonathan A.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	20	8600075		2013-12-03	LIM; Soo-Chan	
	21	8600084		2013-12-03	GARRETT; James E.	
	22	8620006		2013-12-31	BERARDI; William et al.	
	23	8639370		2014-01-28	TORRINI; Antonio et al.	
	24	8654995		2014-02-18	SILBER; Michael W. et al.	
	25	8855319		2014-10-07	LIU; Wei-Han et al.	
	26	8861739		2014-10-14	OJANPERA; Juha P.	
	27	8879761		2014-11-04	JOHNSON; Martin E. et al.	
	28	8914559		2014-12-16	KALAYJIAN; Nicholas et al.	
	29	8934647		2015-01-13	JOYCE; John et al.	
	30	8934655		2015-01-13	BREEN; John J. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	31	8938312		2015-01-20	MILLINGTON; Nicholas et al.	
	32	8942252		2015-01-27	BALASSANIAN; Edward et al.	
	33	8942395		2015-01-27	LISSAMAN; Geoff et al.	
	34	8965546		2015-02-24	VISSER; Erik et al.	
	35	8977974		2015-03-10	KRAUT; Joel	
	36	8984442		2015-03-17	PIRNACK; Tracy et al.	
	37	9020153		2015-04-28	BRITT Jr.; Joe Freeman	
	38	9042556		2015-05-26	KALLAI; Christopher [Us] et al.	
	39	9195258		2015-11-24	MILLINGTON; Nicholas A.J.	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	20010042107		2001-11-15	PALM; Stephen R.	
	2	20010043456		2001-11-22	ATKINSON; Lee	
	3	20010050991		2001-12-13	EVES; David A.	
	4	20020022453		2002-02-21	BALOG; Horia et al.	
	5	20020026442		2002-02-28	LIPSCOMB; Kenneth O. et al.	
	6	20020072816		2002-06-13	SHDEMA; Yoav [Il] et al.	
	7	20020072817		2002-06-13	CHAMPION; Mark	
	8	20020078293		2002-06-20	KOU; Sho et al.	
	9	20020098878		2002-07-25	MOONEY; Philip D. et al.	
	10	20020101357		2002-08-01	GHARAPETIAN; Ara H.	
	11	20020124097		2002-09-05	ISELY; Larson J [Us] et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	20020131761		2002-09-19	KAWASAKI; Kojiro et al.	
	13	20020137505		2002-09-26	EICHE; Steven A. et al.	
	14	20020150053		2002-10-17	GRAY; Donald M. et al.	
	15	20020165921		2002-11-07	SAPIEYEVSKI; Jerzy	
	16	20020188762		2002-12-12	TOMASSETTI; Stephen Robert et al.	
	17	20030014486		2003-01-16	MAY; Gregory J.	
	18	20030023329		2003-01-30	BROOKS; Robert et al.	
	19	20030043856		2003-03-06	LAKANIEMI; Ari et al.	
	20	20030063755		2003-04-03	NOURSE; James D. et al.	
	21	20030073432		2003-04-17	MEADE; William K.	
	22	20030103088		2003-06-05	DRESTI; Mauro et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	20030157951		2003-08-21	HASTY; William V.	
	24	20030167335		2003-09-04	ALEXANDER; Bruce	
	25	20030179780		2003-09-25	WALKER; Anthony et al.	
	26	20030185400		2003-10-02	YOSHIZAWA; Kazuhiko et al.	
	27	20030198257		2003-10-23	SULLIVAN; Gary E. et al.	
	28	20030212802		2003-11-13	RECTOR; Dusty D. et al.	
	29	20030219007		2003-11-27	BARRACK; Craig et al.	
	30	20030231208		2003-12-18	HANON; Kris et al.	
	31	20040001591		2004-01-01	MANI; Murali et al.	
	32	20040014426		2004-01-22	MOORE; Richard A.	
	33	20040015252		2004-01-22	AISO; Masaru et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	20040019807		2004-01-29	FREUND; Gregor P. et al.	
	35	20040023697		2004-02-05	KOMURA; Tatsumi	
	36	20040024478		2004-02-05	HANS; Mathieu Claude et al.	
	37	20040031853		2004-02-19	PENG; Jack Zezhong	
	38	20040037433		2004-02-26	CHEN; Heng-Chien	
	39	20040042629		2004-03-04	MELLONE; Charles M. et al.	
	40	20040059842		2004-03-25	HANSON; Mark L. et al.	
	41	20040081099		2004-04-29	PATTERSON; Stuart et al.	
	42	20040117462		2004-06-17	BODIN; William Kress et al.	
	43	20040136554		2004-07-15	KIRKEBY; Ole	
	44	20040168081		2004-08-26	LADAS; Corey M. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	45	20040171346		2004-09-02	LIN; John	
	46	20040177167		2004-09-09	IWAMURA; Ryuichi et al.	
	47	20040183827		2004-09-23	PUTTERMAN; Daniel et al.	
	48	20040185773		2004-09-23	GERBER; Louis et al.	
	49	20040203590		2004-10-14	SHTEYN; Eugene	
	50	20040223622		2004-11-11	LINDEMANN; Eric Lee [Us] et al.	
	51	20040237750		2004-12-02	SMITH; Margaret Paige et al.	
	52	20040239816		2004-12-02	ANDO; Morio	
	53	20040249490		2004-12-09	SAKAI; Kenji	
	54	20040252400		2004-12-16	BLANK; William Thomas et al.	
	55	20040253969		2004-12-16	NGUYEN; Vu X. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	56	20050060435		2005-03-17	XUE; Xin et al.	
	57	20050100174		2005-05-12	HOWARD; Damian et al.	
	58	20050131558		2005-06-16	BRAITHWAITE; Michael et al.	
	59	20050154766		2005-07-14	HUANG; Wei-Hung et al.	
	60	20050160270		2005-07-21	GOLDBERG; David et al.	
	61	20050197725		2005-09-08	ALEXANDER; Jim et al.	
	62	20050201549		2005-09-15	DEDIEU; Stephane et al.	
	63	20050281138		2005-12-22	SHIMOZAWA; Dai [Jp] et al.	
	64	20060029005		2006-02-09	SLEMMER; John B. et al.	
	65	20060072489		2006-04-06	TOYOSHIMA; Akihiko	
	66	20060089735		2006-04-27	ATKINSON; Lee W.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	67	20060173844		2006-08-03	ZHANG; Junbiao et al.	
	68	20060173972		2006-08-03	JUNG; Edward K. et al.	
	69	20060205349		2006-09-14	PASSIER; Chris et al.	
	70	20060222186		2006-10-05	PAIGE; Robert F. et al.	
	71	20060227985		2006-10-12	KAWANAMI; Kenichiro	
	72	20060229752		2006-10-12	CHUNG; Chul	
	73	20060259649		2006-11-16	HSIEH; Kuan-Hong et al.	
	74	20060270395		2006-11-30	DHAWAN; Anil K [Us] et al.	
	75	20070003067		2007-01-04	GIERL; Stefan et al.	
	76	20070005160		2007-01-04	ZAUCHA; David E. et al.	
	77	20070087686		2007-04-19	HOLM; Jukka [Fi] et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	78	20070142944		2007-06-21	GOLDBERG; David et al.	
	79	20070265031		2007-11-15	KOIZUMI; Michiaki et al.	
	80	20070291961		2007-12-20	SHIN; Min-Chul	
	81	20080075295		2008-03-27	MAYMAN; Avrum G. et al.	
	82	20080077261		2008-03-27	BAUDINO; Daniel A [Us] et al.	
	83	20080092204		2008-04-17	BRYCE; Stuart et al.	
	84	20080144864		2008-06-19	HUON; Graeme John	
	85	20080146289		2008-06-19	KORNELUK; Jose E [Us] et al.	
	86	20080152165		2008-06-26	ZACCHI; Luca	
	87	20080205070		2008-08-28	OSADA; Yasuo	
	88	20080215169		2008-09-04	DEBETTENCOURT; Lisa et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	89	20080216125		2008-09-04	LI; Shipeng et al.	
	90	20080303947		2008-12-11	OHNISHI; Sunao et al.	
	91	20090011798		2009-01-08	YAMADA; Hiroshi	
	92	20090070434		2009-03-12	HIMMELSTEIN; Richard B.	
	93	20090124289		2009-05-14	NISHIDA; Osamu	
	94	20090251604		2009-10-08	IYER; Suraj C.	
	95	20100054709		2010-03-04	MISAWA; Junichiro et al.	
	96	20100087089		2010-04-08	STRUTHERS; Scott et al.	
	97	20100142735		2010-06-10	YOON; Eung-Sik [Kr] et al.	
	98	20100274372		2010-10-28	NIELSEN; Christen V. et al.	
	99	20110001632		2011-01-06	HOHORST; Andrew Gordon	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	100	20110002487		2011-01-06	PANTHER; Heiko et al.	
	101	20110170710		2011-07-14	SON; Beak-Kwon	
	102	20110228944		2011-09-22	CROGHAN; Frank et al.	
	103	20110316768		2011-12-29	MCRAE; Matthew Blake	
	104	20120051558		2012-03-01	KIM; Hae-Jong et al.	
	105	20120051567		2012-03-01	CASTOR-PERRY KENDALL.	
	106	20120127831		2012-05-24	GICKLHORN; Daniel P. et al.	
	107	20120148075		2012-06-14	GOH; Aik Hee Daniel [Sg] et al.	
	108	20120263325		2012-10-18	FREEMAN; Eric J. et al.	
	109	20120275624		2012-11-01	HO; Szuyu et al.	
	110	20120288126		2012-11-15	KARKKAINEN; Asta Maria et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	111	20130010970		2013-01-10	HEGARTY; Patrick James et al.	
	112	20130022221		2013-01-24	KALLAI; Christopher [Us] et al.	
	113	20130028443		2013-01-31	PANCE; Aleksandar et al.	
	114	20130129122		2013-05-23	JOHNSON; Martin E. et al.	
	115	20130259254		2013-10-03	XIANG; Pei et al.	
	116	20140016784		2014-01-16	SEN; Dipanjan et al.	
	117	20140016786		2014-01-16	SEN; Dipanjan	
	118	20140016802		2014-01-16	SEN; Dipanjan	
	119	20140023196		2014-01-23	XIANG; Pei et al.	
	120	20140112481		2014-04-24	LI; Minyue et al.	
	121	20140219456		2014-08-07	MORRELL; Martin James et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	122	20140226823		2014-08-14	SEN; Dipanjan et al.	
	123	20140256260		2014-09-11	UEDA; Joji et al.	
	124	20140294200		2014-10-02	BAUMGARTE; Frank et al.	
	125	20140355768		2014-12-04	SEN; Dipanjan et al.	
	126	20140355794		2014-12-04	MORRELL; Martin James et al.	
	127	20150063610		2015-03-05	MOSSNER; Peter	
	128	20150146886		2015-05-28	BAUMGARTE; Frank M.	
	129	20150201274		2015-07-16	ELLNER; Lars Henrik et al.	
	130	20150281866		2015-10-01	WILLIAMS; Chester Smith et al.	
	131	20150365987		2015-12-17	WEEL; Martin	

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

FOREIGN PATENT DOCUMENTS Remove

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	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]
	1	EUROPEAN PATENT OFFICE, Extended European Search Report mailed on 06 July 2016, issued in connection with European Application No. 16159936.0 - 1568, 8 pages.	
	2	EUROPEAN PATENT OFFICE, Extended European Search Report mailed on 30 June 2016, issued in connection with European Application No. 16157894.3 - 1568, 8 pages.	
	3	FALLER, Christof, "Coding of Spatial Audio Compatible with Different Playback Formats," Audio Engineering Society Convention Paper (Presented at the 117th Convention), October 28-31, 2004, 12 pages.	
	4	Final Office Action mailed on 10 April 2014, issued in connection with U.S. Patent Application No. 13/186249, filed 19 July 2011, 12 pages.	
	5	Fireball DVD and Music Manager DVDM-100 Installation and User's Guide, Copyright 2003, 185 pages.	
	6	Fireball MP-200 User's Manual, Copyright 2006, 93 pages.	
	7	Fireball Remote Control Guide WD006-1-1, Copyright 2003, 19 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	8	Fireball SE-D1 User's Manual, Copyright 2005, 90 pages.	
	9	FOBER et al., "Clock Skew Compensation over a High Latency Network," Proceedings of the ICMC, 2002, pp. 548-552.	
	10	Fries et al. "The MP3 and Internet Audio Handbook: Your Guide to the Digital Music Revolution." 2000, 320 pages.	
	11	GASTON et al., "Methods for Sharing Stereo and Multichannel Recordings Among Planetariums," Audio Engineering Society Convention Paper 7474, 2008, 15 pages.	
	12	General Event Notification Architecture Base: Client to Arbiter (April 2000) (23 pages).	
	13	HERRE et al., "The Reference Model Architecture for MPEG Spatial Audio Coding," Audio Engineering Society Convention Paper (Presented at the 118th Convention), May 28-31, 2005, 13 pages.	
	14	Home Networking with Universal Plug and Play, IEEE Communications Magazine, Vol. 39 No. 12 (December 2001) (D+M_0402025-40) (16 pages).	
	15	"Home Theater Control Systems," Cinema Source, 2002, 19 pages.	
	16	HORWITZ, Jeremy, "Logic3 i-Station25," retrieved from the internet: http://www.ilounge.com/index.php/reviews/entry/logic3-i-station25/, last visited December 17, 2013, 5 pages.	
	17	IBM Home Director Installation and Service Manual, Copyright1998, 124 pages.	
	18	IBM Home Director Owner's Manual, Copyright 1999, 67 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	19	Implicit, LLC v. Sonos, Inc. (No. 14-1330-RGA), Defendant's Original Complaint (Mar. 3, 2017) (15 pages).	
	20	Integra Audio Network Receiver NAC 2.3 Instruction Manual, 68 pages.	
	21	Integra Audio Network Server NAS 2.3 Instruction Manual, pp. 1-32.	
	22	Integra Service Manual, Audio Network Receiver Model NAC-2.3, December 2002, 44 pages.	
	23	Intel Designing a UPnP AV Media Renderer, v. 1.0 ("Intel AV Media Renderer") (May 20, 2003) (SONDM000115117-62) (46 pages).	
	24	Intel Media Renderer Device Interface ("Intel Media Renderer") (September 6, 2002) (62 pages).	
	25	Intel SDK for UPnP Devices Programming Guide, Version 1.2.1, (November 2002) (30 pages).	
	26	INTERNATIONAL BUREAU, International Preliminary Report on Patentability mailed on 30 January 2014, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 6 pages.	
	27	INTERNATIONAL BUREAU, International Preliminary Report on Patentability, mailed on 31 October 2013, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 8 pages.	
	28	INTERNATIONAL SEARCHING AUTHORITY, International Search Report mailed on 13 August 2012, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 3 pages.	
	29	INTERNATIONAL SEARCHING AUTHORITY, International Search Report mailed on 26 December 2012, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 3 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	30	INTERNATIONAL SEARCHING AUTHORITY, Written Opinion mailed on 13 August 2012, issued in connection with International Application No. PCT/US2012/033946, filed on 17 April 2012, 7 pages.	
	31	INTERNATIONAL SEARCHING AUTHORITY, Written Opinion mailed on 26 December 2012, issued in connection with International Application No. PCT/US2012/045894, filed on 09 July 2012, 4 pages.	
	32	ISHIBASHI et al., "A Comparison of Media Synchronization Quality Among Reactive Control Schemes," IEEE Infocom, 2001, pp. 77-84.	
	33	Issues with Mixed IEEE 802.b/802.11g Networks, AVAGO0058, Agere Systems, February 2004, 5 pages.	
	34	JAPANESE PATENT OFFICE, Notice of Rejection mailed 7 March 2017, issued in connection with Japanese Application No. 2016-028196, 2 pages.	
	35	JAPANESE PATENT OFFICE, Notice of Rejection, mailed on 03 February 2015, issued in connection with Japanese Patent Application No. 2014-521648, 7 pages.	
	36	JAPANESE PATENT OFFICE, Office Action mailed on 28 October 2014, issued in connection with Japanese patent application No. 2014-506484, 5 pages.	
	37	JAPANESE PATENT OFFICE, Office Action mailed on 8 May 2018, issued in connection with Japanese Application No. 2017-111806, 8 pages.	
	38	JAPANESE PATENT OFFICE, Translation of Office Action mailed on 8 May 2018, issued in connection with Japanese Application No. 2017-111806, 4 pages.	
	39	JO et al., "Synchronized One-to-many Media Streaming with Adaptive Playout Control," Proceedings of SPIE, 2002, pp. 71-82, Vol. 4861.	
	40	JONES, Stephen, "Dell Digital Audio Receiver: Digital upgrade for your analog stereo," Analog Stereo, 24 June 2000 retrieved 18 June 2014, 2 pages.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	41	Lake Processors: Lake® LM Series Digital Audio Processors Operation Manual, 2011, 71 pages.	
	42	LG: RJP-201M Remote Jack Pack Installation and Setup Guide, 2010, 24 pages.	
	43	LIENHART et al., "On the Importance of Exact Synchronization for Distributed Audio Signal Processing," Session L: Poster Session II - ICASSP'03 Papers, 2002, 1 page.	
	44	LinkSys by Cisco, Wireless Home Audio Controller, Wireless-N Touchscreen Remote DMRW1000 Datasheet, Copyright 2008, 2 pages.	
	45	LinkSys by Cisco, Wireless Home Audio Controller, Wireless-N Touchscreen Remote DMRW1000 User Guide, Copyright 2008, 64 pages.	
	46	LinkSys by Cisco, Wireless Home Audio Player, Wireless-N Music Extender DMP100 Quick Installation Guide, Copyright 2009, 32 pages.	
	47	LinkSys by Cisco, Wireless Home Audio Player, Wireless-N Music Extender DMP100 User Guide, Copyright 2008, 65 pages.	
	48	Linux SDK for UPnP Devices v. 1.2 (Sep. 6, 2002) (101 pages).	
	49	LIU et al., "A synchronization control scheme for real-time streaming multimedia applications," Packet Video, 2003, 10 pages, Vol. 2003.	
	50	LIU et al., "Adaptive Delay Concealment for Internet Voice Applications with Packet-Based Time-Scale Modification," Information Technologies 2000, pp. 91-102.	

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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.

Electronic Acknowledgement Receipt	
EFS ID:	35362768
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:29:22
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	EUROPEAN_NO_16159936_EXTENDED_SEARCH_REPORT_7-6-16.PDF	265965 27812c21f209dee4be98f7ebddcc8778dac006b5	no	8

Warnings:

Information:					
2	Non Patent Literature	EUROPEAN_NO_16157894_EXTENDED_SEARCH_REPORT_6-30-16.PDF	246456 12914e995f010d549b4c31ce094476cfd9b26792	no	8
Warnings:					
Information:					
3	Non Patent Literature	FALLER_2004.PDF	17559506 0ea32c9411b22a201ea0e32690c0f25ea5628512	no	12
Warnings:					
Information:					
4	Non Patent Literature	13186249_FINAL_OA_4-10-14.PDF	412765 3b670cc2171dae1df3a3ca0f9113a75e89954707	no	12
Warnings:					
Information:					
5	Non Patent Literature	FIREBALL_DVDM-100_INSTALLATION_USERS_GUIDE_185PAGES_V2.PDF	14991875 62c990583fe44c169bc315443349f8abc3074da7	no	185
Warnings:					
Information:					
6	Non Patent Literature	FIREBALL_MP-200_93PAGES_V2.PDF	5549797 1cb0b7a1f1ebb3e3579753e88e4b00016e335e04	no	93
Warnings:					
Information:					
7	Non Patent Literature	FIREBALL_WD006-1-1_19PAGES.PDF	2218426 8de029e07206394b2f18b98a273e60ca259bdc48	no	19
Warnings:					
Information:					
8	Non Patent Literature	FIREBALL_SE-D1_USERS_MANUAL_90PAGES-V2.PDF	5386467 bfef43f6b10b2a0a1ee1e428cf2674521a6da52e	no	90
Warnings:					
Information:					

9	Non Patent Literature	FOBER_2002.PDF	5007222 5f214db04c51837d99199871192f4e8a19f7cc7e	no	4
Warnings:					
Information:					
10	Non Patent Literature	MP3_INTERNETAUDIOHANDBOOK_2000_320PAGES_PART1OF2.PDF	14183519 8155caed552e0ac091f4aacb481b1a4489d37bae	no	150
Warnings:					
Information:					
11	Non Patent Literature	MP3_INTERNETAUDIOHANDBOOK_2000_320PAGES-PART2OF2.PDF	16797286 eae1a55bbb3325f94750474d4413500312 01fc0	no	170
Warnings:					
Information:					
12	Non Patent Literature	GASTON_2008.PDF	25429712 8f48f6bffa176f231fa3838b8f53f15ffffff2b2	no	15
Warnings:					
Information:					
13	Non Patent Literature	GENERAL_EVENT_NOTIFICATION_ARCHITECTURE_BASE_2000_23PAGES.PDF	51980 906c2b6278a8d07fdeb95cde5d9e83306e6ce288	no	23
Warnings:					
Information:					
14	Non Patent Literature	HERRE_2005.PDF	20916066 08caa2f82218d0fe3b9a827c620f38cfaa542e33	no	13
Warnings:					
Information:					
15	Non Patent Literature	HOME_NETWORKING_DM_0402025-40_16PAGES.PDF	9816717 d16acbc922c0684bfa987a1b5be62ed16365caec	no	16
Warnings:					
Information:					

16	Non Patent Literature	CINEMA_SOURCE_HOME_THEATER_2002.PDF	3485720 7d6c8c54b1684b579238cff0eff6bd3a900fd67a	no	19
Warnings:					
Information:					
17	Non Patent Literature	HORWITZ_REF_2013.PDF	1041654 4c8854b087257eb517c846c07539d1e9f510ad24	no	5
Warnings:					
Information:					
18	Non Patent Literature	IBM_HOME_DIRECTOR_INSTALLATION_SERVICE_MANUAL_124PAGES.PDF	15956473 6314f1dcdf5f68d65ea8e226786d3d84300dd585	no	124
Warnings:					
Information:					
19	Non Patent Literature	IBM_HOME_DIRECTOR_OWNERS_MANUAL_67PAGES_V2.PDF	7410459 d0506d4e684288fe0f8c89202239778c7082d2b9	no	67
Warnings:					
Information:					
20	Non Patent Literature	IMPLICITLLC_SONOSINC_ORIGINALCOMPLAINT_15PAGES.PDF	1866770 94840942d20c1fe454f3084c794b7b2463ddf5e3	no	15
Warnings:					
Information:					
21	Non Patent Literature	INTEGRA_AUDIO_NETWORK_RECEIVER_NAC2_3_INST_MANUAL.PDF	5015843 111bf628c289b93ec0460d709704c32913714139	no	68
Warnings:					
Information:					
22	Non Patent Literature	INTEGRA_AUDIO_NETWORK_SERVER_NAS2_3_INST_MANUAL.PDF	4573788 9ab726c4dd2095fb64df2a45f69048a5e584a6b2	no	32
Warnings:					
Information:					

23	Non Patent Literature	INTEGRA_SERVICE_MANUAL_NAC-23_44PAGES.PDF	5682573 7cc34eb006d3727108fb8b3c983148b32ff5ec4d	no	44
Warnings:					
Information:					
24	Non Patent Literature	INTELDESIGNING_SONDM000115117-62_46PAGES.PDF	21487917 3818acfd58a1844f3bdcf875b8fabe056bead49c	no	46
Warnings:					
Information:					
25	Non Patent Literature	INTELMEDIARENDERERDEVICE_2002_62PAGES.PDF	230873 93af56f7dc27e60f1dc2bd2053b9b4b32d02c4f7	no	62
Warnings:					
Information:					
26	Non Patent Literature	INTEL_SDK_UPNP_PROGRAMMING_GUIDE_2002_30PAGES.PDF	287348 9f944b5fb8ff224578ed477d527f670591bcb16e	no	30
Warnings:					
Information:					
27	Non Patent Literature	PCTIB2012045894_IPRP_01_30_2014.PDF	203266 7f11126a42ea767ff6a1811b6b35feb0afa162ef	no	6
Warnings:					
Information:					
28	Non Patent Literature	PCTUS2012033946_IPRP_10-31-2013.PDF	270452 94317e6fb35b50232b5b7f6a565c67c199507b84	no	8
Warnings:					
Information:					
29	Non Patent Literature	ISR_PCTUS2012033946_13AUG2012.PDF	112472 303e2c955a8781c0306b325a76de42631434f748	no	3
Warnings:					
Information:					

30	Non Patent Literature	PCTUS2012045894_ISR_12-26-12.PDF	94148 1b81a8f19df487d09e193d7b87d8badc0f7f6a52	no	3
Warnings:					
Information:					
31	Non Patent Literature	WO_PCTUS2012033946_13AUG2012.PDF	286629 5198b6c8e5a2914207fc6f331878061399c98a93	no	7
Warnings:					
Information:					
32	Non Patent Literature	PCTUS2012045894_WO_12-26-12.PDF	99988 b7a29f654e3f813d6d525b45740c4010bb46c87e	no	4
Warnings:					
Information:					
33	Non Patent Literature	ISHIBASHI_A_COMPARISON_OF_MEDIA_2001_8PAGES-V2.PDF	1894249 ccee33b847a24fde66fd399f584014692666a871	no	8
Warnings:					
Information:					
34	Non Patent Literature	ISSUES_AVAGO0058-V2.PDF	1377564 793144f58091f94dbcf170c917620b5928427a3a	no	5
Warnings:					
Information:					
35	Non Patent Literature	2016-028196_JP_OA_WITH_TRANSLATION_3-7-17-V2.PDF	88312 784d8d682d81c82a5432bc3f97457ac08badbf57	no	2
Warnings:					
Information:					
36	Non Patent Literature	JAPANESE_NO_2014-521648_REJECTION_NOTICE_2015-02-03-V2.PDF	316632 6a0630bc1eb25d14c002919312a755dde9c91a17	no	7
Warnings:					
Information:					

37	Non Patent Literature	JP2014-506484_OFFICE_ACTION_10-28-14.PDF	185503 8ebd4f1e1d46383e8e532e5db9e3f453748f737b	no	5
Warnings:					
Information:					
38	Non Patent Literature	2017-111806_JP_OA_11-0501-JP-DIV2_5-8-18_8PAGES.PDF	1079076 76a08c4fa8aada864ff3417a5ca7d50dfa27beb6	no	8
Warnings:					
Information:					
39	Non Patent Literature	2017-111806_OA_TRANSLATION_11-0501-JP-DIV2_5-8-18_4PAGES.PDF	53209 9d363afa817b31eb2120e3d0b94108a2cc4bc3e5	no	4
Warnings:					
Information:					
40	Non Patent Literature	JO_PROCEEDINGSSPIE_2002_4861_71.PDF	623348 7456c250e9a0d9d14bdab77ee04ae019146d379f	no	11
Warnings:					
Information:					
41	Non Patent Literature	JONES_2000.PDF	2767920 6ae528491dacb165a4f1fea5caedb649a2843c7d	no	2
Warnings:					
Information:					
42	Non Patent Literature	LAKE_SERIES_DIGITAL_2011.PDF	4370645 ebc9f43f81c5da0201e69e37a86799d91bb6d594	no	71
Warnings:					
Information:					
43	Non Patent Literature	LG_RJP-201M_REMOTE_2010.PDF	20283650 eca9aa83452c739668fc8df7c3d64dd5aaf5ac8f	no	24
Warnings:					
Information:					

44	Non Patent Literature	LIENHART_2002.PDF	210917 6d3471bc568caeea931144e41573f34e43a38e74	no	1
Warnings:					
Information:					
45	Non Patent Literature	LINKSYS_DMRW1000_DATASHEET_2PAGES.PDF	184015 c726064357019eaf402cbcbf09c2b66f4c1f829f	no	2
Warnings:					
Information:					
46	Non Patent Literature	LINKSYS_DMRW1000_USERGUIDE_64PAGES.PDF	9044320 d1e893540b3ffe5baa8b3f6092c9d6142b504c73	no	64
Warnings:					
Information:					
47	Non Patent Literature	LINKSYS_DMP100_QUICK_INSTALLATION_GUIDE_32PAGES.PDF	3385349 4835be78443842 9e1012fa331258a424ee5eb8a4	no	32
Warnings:					
Information:					
48	Non Patent Literature	LINKSYS_DMP100_USERGUIDE_65PAGES.PDF	8612733 4a53cbef176372759de60c8372502b098f9b8dff	no	65
Warnings:					
Information:					
49	Non Patent Literature	LINUX_SDK_FOR_UPNP_2002_101PAGES.PDF	330243 4b9250fccdc7f98de95e3ab422d6b6b393b99145	no	101
Warnings:					
Information:					
50	Non Patent Literature	LIU_ETAL_A_SYNCHRONIZATION.PDF	14664014 05bfb6e6ebcecfb9188988a5e2de2b2c3e6fd4dc	no	10
Warnings:					
Information:					

51	Non Patent Literature	LIU_ETAL_ADAPTIVE.PDF	3753450 41e262c0ef1ab95b2b0d3858dd003cba164212e3	no	4
Warnings:					
Information:					
52	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_1_IDS_20190306170447.pdf	1060957 6d421e746e9b5f60c1949aa1a4d1de081ed2d92f	no	24
Warnings:					
Information:					
		Total Files Size (in bytes):	281226238		

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.

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

GEORGE, Christopher N.
Hanley, Flight & Zimmerman, LLC.
150 S. Wacker Drive, Suite 2100
Chicago, Illinois 60606
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)*	
30 January 2014 (30.01.2014)	
Applicant's or agent's file reference: 11-0501-PCT	**IMPORTANT NOTICE**
International application No.: PCT/US2012/045894	International filing date *(day/month/year)*: 09 July 2012 (09.07.2012)
Priority date *(day/month/year)*: 19 July 2011 (19.07.2011)	
Applicant: SONOS, INC. et al	

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Kihwan Moon

e-mail: pt01.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 11-0501-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2012/045894	International filing date *(day/month/year)* 09 July 2012 (09.07.2012)	Priority date *(day/month/year)* 19 July 2011 (19.07.2011)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SONOS, INC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☐	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 21 January 2014 (21.01.2014)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Kihwan Moon e-mail: pt01.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
GEORGE CHRISTOPHER N.

HANLEY, FLIGHT & ZIMMERMAN, LLC. 150 S.
WACKER DRIVE, SUITE 2100 CHICAGO IL 60606 USA

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing *(day/month/year)*	**26 DECEMBER 2012 (26.12.2012)**
Applicant's or agent's file reference 11-0501-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2012/045894	**09 JULY 2012 (09.07.2012)**	19 JULY 2011 (19.07.2011)

International Patent Classification (IPC) or both national classification and IPC

H04R 3/00(2006.01)i, H04R 5/02(2006.01)i, H04S 5/02(2006.01)i

Applicant

SONOS, INC. et al

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/KR	Date of completion of this opinion	Authorized officer
Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea Facsimile No. 82-42-472-7140	26 DECEMBER 2012 (26.12.2012)	JEONG, So Yeon Telephone No.82-42-481-5656

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2012/045894

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of :

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into _____ , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:

   a. a sequence listing filed or furnished
      ☐ on paper
      ☐ in electronic form

   b. time of filing or furnishing
      ☐ contained in the international application as filed.
      ☐ filed together with the international application in electronic form.
      ☐ furnished subsequently to this Authority for the purposes of search.

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additioanl copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2012/045894

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-30	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-30	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-30	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2008-0144864 A1 (GRAEME JOHN HUON) 19 June 2008
D2: US 05553147 A (JOSEPH E.M. PINEAU) 03 September 1996
D3: US 2007-0003067 A1 (STEFAN GIERL et al.) 04 January 2007
D4: US 2002-0124097 A1 (LARSON J. ISELY et al.) 05 September 2002

1. Novelty and Inventive Step

1.1 Concerning Claims 1-10

The subject matter of claim 1 differs from these prior art documents in that a method for shaping sound comprises configuring the playback device to reproduce a stereophonic or monaural sound using a plurality of speakers based on an orientation and an audio data stream. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 1 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 2-10 are dependent on claim 1 and therefore meet the requirements of PCT Article 33(2) and (3).

1.2 Concerning Claims 11-20

The subject matter of claim 11 differs from these prior art documents in that a tangible computer readable storage medium including a set of instructions for execution by processor when executed implement a method for shaping sound comprises a playback device reproduces a stereophonic or monaural sound using a plurality of speakers based on an orientation and an audio data stream. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 11 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 12-20 are dependent on claim 11 and therefore meet the requirements of PCT Article 33(2) and (3).

Continued on Supplemental Box

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/US2012/045894

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of :

Box V

1.3 Concerning Claims 21-30

Since the apparatus and the method of claims 21 and 1 are substantially same except the category aspect, claim 21 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 22-30 are dependent on claim 21 and therefore meet the requirements of PCT Article 33(2) and (3).

2. Industrial Applicability

Claims 1-30 are industrially applicable under PCT Article 33(4).

PATENT COOPERATION TREATY

ADVANCE E-MAIL

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING TRANSMITTAL OF COPY OF INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (CHAPTER I OF THE PATENT COOPERATION TREATY)
(PCT Rule 44bis.1(c))

To:

GEORGE, Christopher, N.
Hanley, Flight & Zimmerman, LLC
150 S. Wacker Drive, Suite 2100
Chicago, IL 60606
ETATS-UNIS D'AMERIQUE

Date of mailing *(day/month/year)* 31 October 2013 (31.10.2013)	
Applicant's or agent's file reference 20218/11-0403-PCT	**IMPORTANT NOTICE**

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2012/033946	17 April 2012 (17.04.2012)	18 April 2011 (18.04.2011)

Applicant
SONOS, INC. et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No. +41 22 338 82 70

Authorized officer
Athina Nickitas-Etienne

e-mail: pt04.pct@wipo.int

Form PCT/IB/326 (January 2004)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44*bis*)

Applicant's or agent's file reference 20218/11-0403-PCT	**FOR FURTHER ACTION**	See item 4 below
International application No. PCT/US2012/033946	International filing date *(day/month/year)* 17 April 2012 (17.04.2012)	Priority date *(day/month/year)* 18 April 2011 (18.04.2011)
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant SONOS, INC.		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 *bis*.1(a).

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

   In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

☒	Box No. I	Basis of the report
☐	Box No. II	Priority
☐	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐	Box No. IV	Lack of unity of invention
☒	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
☐	Box No. VI	Certain documents cited
☐	Box No. VII	Certain defects in the international application
☒	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44*bis*.3(c) and 93*bis*.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44*bis* .2).

	Date of issuance of this report 22 October 2013 (22.10.2013)
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer Athina Nickitas-Etienne e-mail: pt04.pct@wipo.int

Form PCT/IB/373 (January 2004)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2012/033946	17.04.2012	18.04.2011

International Patent Classification (IPC) or both national classification and IPC
INV. G11B27/10

Applicant
SONOS, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:	Date of completion of this opinion	Authorized Officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Fax: +49 89 2399 - 4465	see form PCT/ISA/210	Durucan, Emrullah Telephone No. +49 89 2399-0

Form PCT/ISA/237 (Cover Sheet) (July 2009)

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-9
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-9
Industrial applicability (IA)	Yes:	Claims	1-9
	No:	Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D1 US 2005/281138 A1 (SHIMOZAWA DAI [JP] ET AL) 22 December 2005 (2005-12-22)

2 Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claim1 is not new in the sense of Article 33(2) PCT, and the criteria of Article 33(1) PCT are therefore not met.

D1 discloses:

" An apparatus for providing audio, the apparatus comprises: a line-in connector for receiving an audio signal from an audio device; and

(D1, Fig. 1, Par. 0034, 0035)

a processor for determining that the audio signal is present at the line-in connector and responsively switching a source of a playback device to the audio device, for receiving an instruction to stop the play back of audio data from the audio device even when the audio signal is present at the line-in connector, and for determining that the audio signal is no longer present at the line-in connector and responsively rearming such that a subsequent presence of the audio signal will switch the source to the audio device.

(D1, Fig. 4-7 and corresponding paragraphs in the description, switches are intrinsic to any audio playback device)"

3 Since the dependent claims are linked directly to the independent claim, once the latter fails, the former fall apart into a large number of disparate and vague concepts which defy the identification of any clear common and inventive subject matter. Thus these claims also fail to meet the clarity requirements of Art 6 PCT.

Re Item VIII

Certain observations on the international application

4 Claim 1-9 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The functional statements / expressions/ terms:

- apparatus for providing audio
- receiving audio signal form an audio device
- switching a source of playback device
- switch source to the audio device

do not enable the skilled person to determine which technical features are necessary to perform the stated functions.

The distinction and function of all the apparatuses, devices and sources for audio is not clear. More functional and logical distinction for the devices and apparatuses is required. For example "apparatus for providing audio" might be a controller.

5 Thus, due to the ambiguity of the function and logical connection between the apparatuses, playback devices and sources, Claim 1 is not supported by the description as required by Article 6 PCT, as its scope is broader than justified by the description and drawings.

It seems that there is even an ambiguity within the description e.g. the zone players (102,104,106) in Fig 1 are defined as zone players, multimedia players Par. 0037 and playback devices Par. 0060 rendering the the definition of the subject-matter of the claims on file unclear, Article 6 PCT.

6 It is clear from the description on Par. 0077 that the feature of grouping of areas/rooms/zones (see also Fig. 3, 5 and Par. 0073-0076, 0082) is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

7 It is clear from the description on par. 0079, 0080 that the feature of generating alarm in certain zones is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

8 It is clear from the description on Par. 0084, Par. 0078 that the feature of setting/adjusting volume levels to zones/zone players is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

9 According to the requirements of Rule 11.13(l) reference signs not appearing in the description shall not appear in the drawings, and vice versa. This requirement is not met in view of the reference sign in par. 0077 where the garden and the garage are assigned to "Group 2". However in the concerned Fig. 3B said "Group 2" does not exist.

10 Although claims 8 and 9 have been drafted as separate claims, they to relate to the same subject-matter The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
20218/11-0403-PCT		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/US2012/033946	17/04/2012	18/04/2011
Applicant		
SONOS, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the **language,** the international search was carried out on the basis of:
      [X] the international application in the language in which it was filed
      [ ] a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. [ ] This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).
   c. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box No. II)

3. [ ] **Unity of invention is lacking** (see Box No III)

4. With regard to the **title,**
   [ ] the text is approved as submitted by the applicant
   [X] the text has been established by this Authority to read as follows:

   SMART LINE-IN PROCESSING FOR AUDIO

5. With regard to the **abstract,**
   [X] the text is approved as submitted by the applicant
   [ ] the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings,**
   a. the figure of the **drawings** to be published with the abstract is Figure No. 1
      [ ] as suggested by the applicant
      [X] as selected by this Authority, because the applicant failed to suggest a figure
      [ ] as selected by this Authority, because this figure better characterizes the invention
   b. [ ] none of the figures is to be published with the abstract

A. CLASSIFICATION OF SUBJECT MATTER
INV. G11B27/10
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/281138 A1 (SHIMOZAWA DAI [JP] ET AL) 22 December 2005 (2005-12-22) the whole document	1-9
X	KR 2004 0031853 A (MICRONIC SYSTEM CO LTD) 14 April 2004 (2004-04-14) abstract	1-9
X	JP 2001 210019 A (KENWOOD CORP) 3 August 2001 (2001-08-03)	1,6-9
A	abstract	2-5
X	JP 2003 045166 A (KENWOOD CORP) 14 February 2003 (2003-02-14)	1,2,8,9
A	abstract	3-7

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
3 August 2012	13/08/2012

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Durucan, Emrullah

1

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2005281138 A1	22-12-2005	JP 4037851 B2	23-01-2008
		JP 2006004489 A	05-01-2006
		US 2005281138 A1	22-12-2005
KR 20040031853 A	14-04-2004	NONE	
JP 2001210019 A	03-08-2001	JP 3742965 B2	08-02-2006
		JP 2001210019 A	03-08-2001
JP 2003045166 A	14-02-2003	NONE	

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
11-0501-PCT		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/US2012/045894	**09 JULY 2012 (09.07.2012)**	19 JULY 2011 (19.07.2011)

Applicant

SONOS, INC. et al

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**
   a. With regard to the language, the international search was carried out on the basis of:
      ☒ the international application in the language in which it was filed
      ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))
   b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).
   c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.
2. ☐ **Certain claims were found unsearchable** (See Box No. II)
3. ☐ **Unity of invention is lacking** (See Box No. III)
4. With regard to the **title,**
   ☒ the text is approved as submitted by the applicant.
   ☐ the text has been established by this Authority to read as follows:
5. With regard to the **abstract,**
   ☒ the text is approved as submitted by the applicant.
   ☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. With regard to the drawings,
   a. the figure of the drawings to be published with the abstract is Figure No. 1
      ☐ as suggested by the applicant.
      ☒ as selected by this Authority, because the applicant failed to suggest a figure.
      ☐ as selected by this Authority, because this figure better characterizes the invention.
   b. ☐ none of the figure is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/045894

A. CLASSIFICATION OF SUBJECT MATTER

H04R 3/00(2006.01)i, H04R 5/02(2006.01)i, H04S 5/02(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H04R 3/00; G06F 15/16; H04R 5/02; H04R 5/00; H04H 5/00; H04R 29/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: speaker orientation, roll, pitch, frequency, rotation, stereophonic, monaural, shaping sound, sensor, accelerometer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2008-0144864 A1 (GRAEME JOHN HUON) 19 June 2008 See abstract, paragraphs [0217],[0221],[0249],[0283], claim 165 and figures 1-10.	1-30
A	US 05553147 A (JOSEPH E.M. PINEAU) 03 September 1996 See abstract, claims 1,9 and figures 3-10.	1-30
A	US 2007-0003067 A1 (STEFAN GIERL et al.) 04 January 2007 See abstract, paragraphs [0013]-[0018] and claim 23.	1-30
A	US 2002-0124097 A1 (LARSON J. ISELY et al.) 05 September 2002 See abstract, claims 1,8 and figures 1-5.	1-30

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents,such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
26 DECEMBER 2012 (26.12.2012)	**26 DECEMBER 2012 (26.12.2012)**

Name and mailing address of the ISA/KR	Authorized officer
Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea Facsimile No. 82-42-472-7140	JEONG, So Yeon Telephone No. 82-42-481-5656

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/US2012/045894

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008-0144864 A1	19.06.2008	AU 2004-320207 A1	08.12.2005
		EP 1749420 A1	07.02.2007
		EP 1749420 A4	15.10.2008
		WO 2005-117483 A1	08.12.2005
US 05553147 A	03.09.1996	CA 2162567 A1	24.11.1994
		CA 2162567 C	10.04.2001
		CN 1055601 C	16.08.2000
		CN 1126020 A	03.07.1996
		CN 1126020 C0	03.07.1996
		EP 0698334 A1	25.03.1998
		EP 0698334 B1	30.12.1998
		JP 02-961327 B2	06.08.1999
		JP 08-508150 A	27.08.1996
		JP 2961327 B2	12.10.1999
		KR 10-0166662 B1	01.02.1999
		WO 94-27416 A1	24.11.1994
US 2007-0003067 A1	04.01.2007	DE 10110422 A1	19.09.2002
		EP 1241797 A2	18.09.2002
		EP 1241797 A3	05.10.2005
		US 2002-0146134 A1	10.10.2002
		US 7065217 B2	20.06.2006
		US 7889871 B2	15.02.2011
US 2002-0124097 A1	05.09.2002	None	

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)* see form PCT/ISA/210 (second sheet)	
Applicant's or agent's file reference see form PCT/ISA/220	**FOR FURTHER ACTION** See paragraph 2 below
International application No. PCT/US2012/033946	International filing date *(day/month/year)* 17.04.2012
Priority date *(day/month/year)* 18.04.2011	
International Patent Classification (IPC) or both national classification and IPC INV. G11B27/10	
Applicant SONOS, INC.	

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:	Date of completion of this opinion	Authorized Officer
European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Fax: +49 89 2399 - 4465	see form PCT/ISA/210	Durucan, Emrullah Telephone No. +49 89 2399-0

Form PCT/ISA/237 (Cover Sheet) (July 2009)

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	
	No:	Claims	1-9
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-9
Industrial applicability (IA)	Yes:	Claims	1-9
	No:	Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Reference is made to the following document:

D1 US 2005/281138 A1 (SHIMOZAWA DAI [JP] ET AL) 22 December 2005 (2005-12-22)

2 Furthermore, the above-mentioned lack of clarity notwithstanding, the subject-matter of claim1 is not new in the sense of Article 33(2) PCT, and the criteria of Article 33(1) PCT are therefore not met.

D1 discloses:

" An apparatus for providing audio, the apparatus comprises: a line-in connector for receiving an audio signal from an audio device; and

(D1, Fig. 1, Par. 0034, 0035)

a processor for determining that the audio signal is present at the line-in connector and responsively switching a source of a playback device to the audio device, for receiving an instruction to stop the play back of audio data from the audio device even when the audio signal is present at the line-in connector, and for determining that the audio signal is no longer present at the line-in connector and responsively rearming such that a subsequent presence of the audio signal will switch the source to the audio device.

(D1, Fig. 4-7 and corresponding paragraphs in the description, switches are intrinsic to any audio playback device)"

3 Since the dependent claims are linked directly to the independent claim, once the latter fails, the former fall apart into a large number of disparate and vague concepts which defy the identification of any clear common and inventive subject matter. Thus these claims also fail to meet the clarity requirements of Art 6 PCT.

Re Item VIII

Certain observations on the international application

4 Claim 1-9 do not meet the requirements of Article 6 PCT in that the matter for which protection is sought is not clearly defined. The functional statements / expressions/ terms:

- apparatus for providing audio
- receiving audio signal form an audio device
- switching a source of playback device
- switch source to the audio device

do not enable the skilled person to determine which technical features are necessary to perform the stated functions.

The distinction and function of all the apparatuses, devices and sources for audio is not clear. More functional and logical distinction for the devices and apparatuses is required. For example "apparatus for providing audio" might be a controller.

5 Thus, due to the ambiguity of the function and logical connection between the apparatuses, playback devices and sources, Claim 1 is not supported by the description as required by Article 6 PCT, as its scope is broader than justified by the description and drawings.

It seems that there is even an ambiguity within the description e.g. the zone players (102,104,106) in Fig 1 are defined as zone players, multimedia players Par. 0037 and playback devices Par. 0060 rendering the the definition of the subject-matter of the claims on file unclear, Article 6 PCT.

6 It is clear from the description on Par. 0077 that the feature of grouping of areas/rooms/zones (see also Fig. 3, 5 and Par. 0073-0076, 0082) is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

7 It is clear from the description on par. 0079, 0080 that the feature of generating alarm in certain zones is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

8 It is clear from the description on Par. 0084, Par. 0078 that the feature of setting/adjusting volume levels to zones/zone players is essential to the definition of the invention.

Since independent claim 1 does not contain this feature it does not meet the requirement following from Article 6 PCT taken in combination with Rule 6.3(b) PCT that any independent claim must contain all the technical features essential to the definition of the invention.

9 According to the requirements of Rule 11.13(l) reference signs not appearing in the description shall not appear in the drawings, and vice versa. This requirement is not met in view of the reference sign in par. 0077 where the garden and the garage are assigned to "Group 2". However in the concerned Fig. 3B said "Group 2" does not exist.

10 Although claims 8 and 9 have been drafted as separate claims, they to relate to the same subject-matter The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

Possible steps after receipt of the international search report (ISR) and written opinion of the International Searching Authority (WO-ISA)

General information	For all international applications filed on or after 01/01/2004 the competent ISA will establish an ISR. It is accompanied by the WO-ISA. Unlike the former written opinion of the IPEA (Rule 66.2 PCT), the WO-ISA is not meant to be responded to, but to be taken into consideration for further procedural steps. This document explains about the possibilities.
Amending claims under Art. 19 PCT	Within 2 months after the date of mailing of the ISR and the WO-ISA the applicant may file amended claims under Art. 19 PCT directly with the International Bureau of WIPO. The PCT reform of 2004 did not change this procedure. For further information please see Rule 46 PCT as well as form PCT/ISA/220 and the corresponding Notes to form PCT/ISA/220.
Filing a demand for international preliminary examination	In principle, the WO-ISA will be considered as the written opinion of the IPEA. This should, in many cases, make it unnecessary to file a demand for international preliminary examination. If the applicant nevertheless wishes to file a demand this must be done before expiry of 3 months after the date of mailing of the ISR/WO-ISA or 22 months after priority date, whichever expires later (Rule 54bis PCT). Amendments under Art. 34 PCT can be filed with the IPEA as before, normally at the same time as filing the demand (Rule 66.1 (b) PCT). If a demand for international preliminary examination is filed and no comments/amendments have been received the WO-ISA will be transformed by the IPEA into an IPRP (International Preliminary Report on Patentability) which would merely reflect the content of the WO-ISA. The demand can still be withdrawn (Art. 37 PCT).
Filing informal comments	After receipt of the ISR/WO-ISA the applicant may file informal comments on the WO-ISA directly with the International Bureau of WIPO. These will be communicated to the designated Offices together with the IPRP (International Preliminary Report on Patentability) at 30 months from the priority date. Please also refer to the next box.
End of the international phase	At the end of the international phase the International Bureau of WIPO will transform the WO-ISA or, if a demand was filed, the written opinion of the IPEA into the IPRP, which will then be transmitted together with possible informal comments to the designated Offices. The IPRP replaces the former IPER (international preliminary examination report).
Relevant PCT Rules and more information	Rule 43 PCT, Rule 43bis PCT, Rule 44 PCT, Rule 44bis PCT, PCT Newsletter 12/2003, OJ 11/2003, OJ 12/2003

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
GEORGE CHRISTOPHER N.

HANLEY, FLIGHT & ZIMMERMAN, LLC. 150 S.
WACKER DRIVE, SUITE 2100 CHICAGO IL 60606 USA

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing *(day/month/year)*	**26 DECEMBER 2012 (26.12.2012)**
Applicant's or agent's file reference 11-0501-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2012/045894	**09 JULY 2012 (09.07.2012)**	19 JULY 2011 (19.07.2011)

International Patent Classification (IPC) or both national classification and IPC

H04R 3/00(2006.01)i, H04R 5/02(2006.01)i, H04S 5/02(2006.01)i

Applicant

SONOS, INC. et al

1. This opinion contains indications relating to the following items:

- [X] Box No. I Basis of the opinion
- [ ] Box No. II Priority
- [ ] Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- [ ] Box No. IV Lack of unity of invention
- [X] Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- [ ] Box No. VI Certain documents cited
- [ ] Box No. VII Certain defects in the international application
- [ ] Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.
For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/KR	Date of completion of this opinion	Authorized officer
Korean Intellectual Property Office 189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea Facsimile No. 82-42-472-7140	26 DECEMBER 2012 (26.12.2012)	JEONG, So Yeon Telephone No.82-42-481-5656

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2012/045894

Box No. 1 Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of :

   ☒ the international application in the language in which it was filed

   ☐ a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of:

   a. a sequence listing filed or furnished
      ☐ on paper
      ☐ in electronic form

   b. time of filing or furnishing
      ☐ contained in the international application as filed.
      ☐ filed together with the international application in electronic form.
      ☐ furnished subsequently to this Authority for the purposes of search.

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2012/045894

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-30	YES
	Claims	NONE	NO
Inventive step (IS)	Claims	1-30	YES
	Claims	NONE	NO
Industrial applicability (IA)	Claims	1-30	YES
	Claims	NONE	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2008-0144864 A1 (GRAEME JOHN HUON) 19 June 2008
D2: US 05553147 A (JOSEPH E.M. PINEAU) 03 September 1996
D3: US 2007-0003067 A1 (STEFAN GIERL et al.) 04 January 2007
D4: US 2002-0124097 A1 (LARSON J. ISELY et al.) 05 September 2002

1. Novelty and Inventive Step

1.1 Concerning Claims 1-10

The subject matter of claim 1 differs from these prior art documents in that a method for shaping sound comprises configuring the playback device to reproduce a stereophonic or monaural sound using a plurality of speakers based on an orientation and an audio data stream. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 1 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 2-10 are dependent on claim 1 and therefore meet the requirements of PCT Article 33(2) and (3).

1.2 Concerning Claims 11-20

The subject matter of claim 11 differs from these prior art documents in that a tangible computer readable storage medium including a set of instructions for execution by processor when executed implement a method for shaping sound comprises a playback device reproduces a stereophonic or monaural sound using a plurality of speakers based on an orientation and an audio data stream. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination. Therefore, claim 11 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 12-20 are dependent on claim 11 and therefore meet the requirements of PCT Article 33(2) and (3).

Continued on Supplemental Box

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of:

Box V

1.3 Concerning Claims 21-30

Since the apparatus and the method of claims 21 and 1 are substantially same except the category aspect, claim 21 meets the requirements of PCT Article 33(2) and (3) with respect to novelty and inventive step.

Claims 22-30 are dependent on claim 21 and therefore meet the requirements of PCT Article 33(2) and (3).

2. Industrial Applicability

Claims 1-30 are industrially applicable under PCT Article 33(4).

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	16166518
Filing Date	2018-10-22
First Named Inventor	MILLINGTON; Nicholas A.J.
Art Unit	2656
Examiner Name	MCCORD, Paul C.
Attorney Docket Number	11-0403-CON1018

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	D260764	S	1981-09-15	CASTAGNA; John F. et al.	
	2	D279779	S	1985-07-23	TAYLOR; Terrance N.	
	3	D293671	S	1988-01-12	BEAUMONT; Thomas G.	
	4	D301037	S	1989-05-09	MATSUDA; Hari	
	5	D304443	S	1989-11-07	GRINYER; Clive A. et al.	
	6	D313023	S	1990-12-18	KOLENDA; David F. et al.	
	7	D313398	S	1991-01-01	GILCHRIST; Thomas L.	
	8	D313600	S	1991-01-08	WEBER; Edward W.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	9	D320598	S	1991-10-08	AUERBACH; Marc et al.	
	10	D322609	S	1991-12-24	PATTON; Douglas M.	
	11	D326450	S	1992-05-26	WATANABE; Katsuhito	
	12	D327060	S	1992-06-16	WACHOB; David E. et al.	
	13	D331388	S	1992-12-01	DAHNERT; Dean L. et al.	
	14	D333135	S	1993-02-09	WACHOB; David E. et al.	
	15	D350531	S	1994-09-13	TSUJI; Masao	
	16	D350962	S	1994-09-27	REARDON; John D. et al.	
	17	D354059	S	1995-01-03	HENDRICKS; John S.	
	18	D354751	S	1995-01-24	HERSH; Joseph B. et al.	
	19	D356093	S	1995-03-07	MCCAULEY; Gilbert L. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	20	D356312	S	1995-03-14	ALTHANS; Richard K.	
	21	D357024	S	1995-04-04	TOKIYAMA; Masaru et al.	
	22	D362446	S	1995-09-19	GASIOREK; John G. et al.	
	23	D363933	S	1995-11-07	STARCK; Philippe	
	24	D364877	S	1995-12-05	TOKIYAMA; Masaru et al.	
	25	D364878	S	1995-12-05	GREEN; Dewayne E. et al.	
	26	D365102	S	1995-12-12	GIOSCIA; Richard	
	27	D366044	S	1996-01-09	HARA; Masayuki et al.	
	28	D372716	S	1996-08-13	THORNE; Edwin	
	29	D377651	S	1997-01-28	BIASOTTI; Mark et al.	
	30	D379816	S	1997-06-10	LAITURI; David W. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	31	D380752	S	1997-07-08	HANSON; Bruce D.	
	32	D382271	S	1997-08-12	AKWIWU; Ndukwe	
	33	D384940	S	1997-10-14	KONO; Kenichiro et al.	
	34	D387352	S	1997-12-09	KANEKO; Steven T. et al.	
	35	D388792	S	1998-01-06	NYKERK; Michael	
	36	D389143	S	1998-01-13	WICKS; James E.	
	37	D392641	S	1998-03-24	FENNER; Knut T.	
	38	D393628	S	1998-04-21	LEDBETTER; Carl J. et al.	
	39	D394659	S	1998-05-26	BIASOTTI; Mark et al.	
	40	D395889	S	1998-07-07	GERBA; George et al.	
	41	D397996	S	1998-09-08	SMITH; Michael A.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	42	D401587	S	1998-11-24	RUDOLPH; Daniel L.	
	43	D404741	S	1999-01-26	SCHUMAKER; Nevenka et al.	
	44	D405071	S	1999-02-02	GAMBARO; Thomas L.	
	45	D406847	S	1999-03-16	GERBA; George et al.	
	46	D407071	S	1999-03-23	KEATING; Virginia Walker	
	47	D410927	S	1999-06-15	YAMAGISHI; Yoshinobu	
	48	D412337	S	1999-07-27	HAMANO; Masataka	
	49	D415496	S	1999-10-19	GERBA; George et al.	
	50	D416021	S	1999-11-02	GODETTE; Robert G. et al.	
	51	D420006	S	2000-02-01	TONINO; Eduardus Josephus Anna Maria	
	52	D429246	S	2000-08-08	HOLMA; Tapani	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	53	D430143	S	2000-08-29	RENK; Thomas Edward	
	54	D431552	S	2000-10-03	BACKS; Jochen Philipp et al.	
	55	D432525	S	2000-10-24	BEECROFT; Troy C.	
	56	D444475		2001-07-03	LEVEY; Keith P. et al.	
	57	D444475		2001-07-03	LEVEY; Keith P. et al.	
	58	D452520		2001-12-25	GOTHAM; David R. et al.	
	59	D462339		2002-09-03	ALLEN; Paul G. et al.	
	60	D462340		2002-09-03	ALLEN; Paul G. et al.	
	61	D462945		2002-09-17	SKULLEY; Gerald W.	
	62	D466108		2002-11-26	GLODAVA; Derrick A. et al.	
	63	D468297		2003-01-07	IKEDA; Tetsuya	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	64	D474763		2003-05-20	TOZAKI; Ray et al.	
	65	D475993		2003-06-17	MEYER; Robert K.	
	66	D476643		2003-07-01	YAMAGISHI; Masayuki	
	67	D477310		2003-07-15	MORANSAIS; Charles	
	68	D478051		2003-08-05	SAGAWA; So	
	69	D478069		2003-08-05	BECK; Benjamin et al.	
	70	D478896		2003-08-26	SUMMERS; Kim Renee	
	71	D479520		2003-09-09	DE; Saulles Stephen	
	72	D481056		2003-10-21	KAWASAKI; Mugio et al.	
	73	D486145		2004-02-03	KAMINSKI; Dariusz S. et al.	
	74	D491925		2004-06-22	GRIESAU; Gene W. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	75	D493148		2004-07-20	SHIBATA; Kumiko et al.	
	76	D495333		2004-08-31	BORSBOOM; Antonious M.	
	77	D496003		2004-09-14	SPIRA; Joel S.	
	78	D496005		2004-09-14	WANG; Carter	
	79	D496335		2004-09-21	SPIRA; Joel S.	
	80	D497363		2004-10-19	OLSON; Mark H. et al.	
	81	D499086		2004-11-30	POLITO; Fred	
	82	D499395		2004-12-07	HSU; Gary	
	83	D499718		2004-12-14	CHEN; Alex	
	84	D500015		2004-12-21	GUBBE; Bernd	
	85	D501477		2005-02-01	HALL; David	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	86	D504872		2005-05-10	UEHARA; Mitsuhiro et al.	
	87	D504885		2005-05-10	ZHANG; Jinsong et al.	
	88	D506463		2005-06-21	DANIELS; Wilfried Johan Paul Ferdinand	
	89	D515072		2006-02-14	LEE; Nikolas Ian	
	90	D515557		2006-02-21	OKULEY; James M.	
	91	D518475		2006-04-04	YANG; Yu-Ching et al.	
	92	D524296		2006-07-04	KITA; Toshiyuki	
	93	D527375		2006-08-29	FLORA; William T. et al.	
	94	3956591		1976-05-11	GATES Jr.; ,William A.	
	95	4105974		1978-08-08	ROGERS; Edwin F.	
	96	4306114		1981-12-15	CALLAHAN; Jeffery C.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	97	4509211		1985-04-02	ROBBINS; Michael S.	
	98	4530091		1985-07-16	CROCKETT; Gary B.	
	99	4696037		1987-09-22	FIERENS; Gustaaf E. M.	
	100	4701629		1987-10-20	CITROEN; Maxime H.	
	101	4712105		1987-12-08	KOEHLER; Hans E. P.	
	102	4731814		1988-03-15	BECKER; William R. et al.	
	103	4824059		1989-04-25	BUTLER; Les I.	
	104	4845751		1989-07-04	SCHWAB; Brian H.	
	105	4994908		1991-02-19	KUBAN; Curt M. et al.	
	106	4995778		1991-02-26	BRUESSEL; Richard	
	107	5086385		1992-02-04	LAUNEY; Reuel O. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	108	5151922		1992-09-29	WEISS; Karl R.	
	109	5182552		1993-01-26	PAYNTING; Richard J.	
	110	5237327		1993-08-17	SAITOH; Mitsumasa et al.	
	111	5272757		1993-12-21	SCOFIELD; William C. et al.	
	112	5361381		1994-11-01	SHORT; William R.	
	113	5372441		1994-12-13	LOUIS; William M.	
	114	5406634		1995-04-11	ANDERSON; Charles W [Us] et al.	
	115	5430485		1995-07-04	LANKFORD; Douglas E. et al.	
	116	5440644		1995-08-08	FARINELLI; Robert [Us] et al.	
	117	5457448		1995-10-10	TOTSUKA; Keiichi et al.	
	118	5481251		1996-01-02	BUYS; Menno et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	119	5515345		1996-05-07	BARREIRA; Jeane K. et al.	
	120	5553147		1996-09-03	PINEAU; Joseph E. M.	
	121	5553314		1996-09-03	GRUBE; Gary W. et al.	
	122	5625350		1997-04-29	FUKATSU; Hitoshi et al.	
	123	5640388		1997-06-17	WOODHEAD; Douglas F. et al.	
	124	5661665		1997-08-26	GLASS; Adam et al.	
	125	5740235		1998-04-14	LESTER; James William et al.	
	126	5742623		1998-04-21	NUBER; Ray et al.	
	127	5761320		1998-06-02	FARINELLI; Robert et al.	
	128	5774016		1998-06-30	KETTERER; Ernest R.	
	129	5790543		1998-08-04	CLOUTIER; Leo	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	130	5812201		1998-09-22	YOO; Ki Ryung	
	131	5818948		1998-10-06	GULICK; Dale E.	
	132	5832024		1998-11-03	SCHOTZ; Larry et al.	
	133	5848152		1998-12-08	SLIPY; Michael J. et al.	
	134	5852722		1998-12-22	HAMILTON; Graham	
	135	5875233		1999-02-23	COX; Daniel R.	
	136	5905768		1999-05-18	MATURI; Greg et al.	
	137	5910991		1999-06-08	FARRAR; Douglas M.	
	138	5923902		1999-07-13	INAGAKI; Yoshihiro	
	139	5946343		1999-08-31	SCHOTZ; Larry et al.	
	140	5956025		1999-09-21	GOULDEN; Lorna et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	141	5960006		1999-09-28	MATURI; Greg et al.	
	142	5984512		1999-11-16	JONES; Anthony Mark et al.	
	143	5987611		1999-11-16	FREUND; Gregor	
	144	5990884		1999-11-23	DOUMA; Peter et al.	
	145	5991307		1999-11-23	KOMURO; Teruyoshi et al.	
	146	5999906		1999-12-07	MERCS; Laura et al.	
	147	6018376		2000-01-25	NAKATANI; Shintarou	
	148	6029196		2000-02-22	LENZ; Michael A.	
	149	6032202		2000-02-29	LEA; Rodger J [Us] et al.	
	150	6038614		2000-03-14	CHAN; Rix S. et al.	
	151	6046550		2000-04-04	FERENCE; Jonathan H. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	152	6061457		2000-05-09	STOCKHAMER; Lee	
	153	6081266		2000-06-27	SCIAMMARELLA; Eduardo	
	154	6088063		2000-07-11	SHIBA; Kosuke	
	155	6101195		2000-08-08	LYONS; Paul Wallace et al.	
	156	6127941		2000-10-03	VAN RYZIN; John M.	
	157	6148205		2000-11-14	COTTON; Timothy R.	
	158	6169725		2001-01-02	GIBBS; Simon J. et al.	
	159	6181383		2001-01-30	FOX; Edward C. et al.	
	160	6195435		2001-02-27	KITAMURA; John S.	
	161	6212282		2001-04-03	MERSHON; Stuart	
	162	6246701		2001-06-12	SLATTERY; William	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	163	6256554		2001-07-03	DILORENZO; Mark	
	164	6269406		2001-07-31	DUTCHER; David Paul et al.	
	165	6301012		2001-10-09	WHITE; Craig R. et al.	
	166	6310652		2001-10-30	LI; Stephen et al.	
	167	6313879		2001-11-06	KUBO; Hiroaki et al.	
	168	6321252		2001-11-20	BHOLA; Sumeer et al.	
	169	6353172		2002-03-05	FAY; Todor C. et al.	
	170	6356871		2002-03-12	HEMKUMAR; Nariankadu Datatreya et al.	
	171	6404811		2002-06-11	CVETKO; John F. et al.	
	172	6418150		2002-07-09	STAATS; Erik P.	
	173	6442443		2002-08-27	FUJII; Kazuo et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	174	6449642		2002-09-10	BOURKE-DUNPHY ERIN MARIE . et al.	
	175	6456783		2002-09-24	ANDO; Hideo et al.	
	176	6463474		2002-10-08	FUH; Tzong-Fen et al.	
	177	6466832		2002-10-15	ZUQERT; Benjamin et al.	
	178	6469633		2002-10-22	WACHTER; Martin Richard [Us] et al.	
	179	6487296		2002-11-26	ALLEN; Steven W. et al.	
	180	6493832		2002-12-10	ITAKURA; Eisaburo et al.	
	181	6522886		2003-02-18	YOUNGS; Edward A. et al.	
	182	6535121		2003-03-18	MATHNEY; Richard K. et al.	
	183	6611537		2003-08-26	EDENS; Glenn T. et al.	
	184	6631410		2003-10-07	KOWALSKI; John Michael [Us] et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	185	6636269		2003-10-21	BALDWIN; James A.	
	186	6653899		2003-11-25	ORGANVIDEZ; Juan H. et al.	
	187	6654720		2003-11-25	GRAHAM; Stephen Glen et al.	
	188	6654956		2003-11-25	TRINH; Vincent et al.	
	189	6684060		2004-01-27	CURTIN; Steven D.	
	190	6697687		2004-02-24	KASAHARA; Yasuhiro et al.	
	191	6704421		2004-03-09	KITAMURA; John S.	
	192	6741961		2004-05-25	LIM; Chae-Duck	
	193	6757517		2004-06-29	CHANG; Chin-Chi [Tw] et al.	
	194	6778073		2004-08-17	LUTTER; Robert Pierce et al.	
	195	6778869		2004-08-17	CHAMPION; Mark	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	196	6809635		2004-10-26	KAARESOJA; Topi	
	197	6816510		2004-11-09	BANERJEE; Subrata	
	198	6826283		2004-11-30	WHEELER; Thomas M. et al.	
	199	6859460		2005-02-22	CHEN; Michael C.	
	200	6859538		2005-02-22	VOLTZ; Christopher	
	201	6873862		2005-03-29	RESHEFSKY; Marc Alan	
	202	6882335		2005-04-19	SAARINEN; Pertti	
	203	6901439		2005-05-31	BONASIA; Gaetano et al.	
	204	6915347		2005-07-05	HANKO; James G. et al.	
	205	6919771		2005-07-19	NAKAJIMA; Kouji	
	206	6931557		2005-08-16	TOGAWA; Yoshifusa	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	207	6937988		2005-08-30	HEMKUMAR; Nariankadu Datatreya et al.	
	208	6987767		2006-01-17	SAITO; Tatsunori	
	209	6999827		2006-02-14	YONG; Yan Kang	
	210	7046677		2006-05-16	MONTA; Peter et al.	
	211	7072477		2006-07-04	KINCAID; William S.	
	212	7092528		2006-08-15	PATRICK; Kyle N. et al.	
	213	7092694		2006-08-15	GRIEP; Pieter Dingenis et al.	
	214	7096169		2006-08-22	CRUTCHFIELD; William G. et al.	
	215	7120168		2006-10-10	ZIMMERMANN; Klaus	
	216	7130316		2006-10-31	KOVACEVIC; Branko D.	
	217	7130608		2006-10-31	HOLLSTROM; Magnus et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	218	7130616		2006-10-31	JANIK; Craig M.	
	219	7136934		2006-11-14	CARTER; Harry Nick et al.	
	220	7139981		2006-11-21	MAYER; Theodore et al.	
	221	7143939		2006-12-05	HENZERLING; David P.	
	222	7146260		2006-12-05	PRESTON; Dan Alan et al.	
	223	7161939		2007-01-09	ISRAEL; David et al.	
	224	7197148		2007-03-27	NOURSE; James D. et al.	
	225	7206618		2007-04-17	LATTO; Antonio T. et al.	
	226	7218708		2007-05-15	BEREZOWSKI; Andrew G. et al.	
	227	7236773		2007-06-26	THOMAS; Graham	
	228	7260616		2007-08-21	COOK; Fred S.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	229	7263110		2007-08-28	FUJISHIRO; Yoshiya	
	230	7277547		2007-10-02	DELKER; Jason R. et al.	
	231	7289631		2007-10-30	ISHIDOSHIRO; Takashi	
	232	7295548		2007-11-13	BLANK; William Thomas [Us] et al.	
	233	7302468		2007-11-27	WIJERATNE; Viranga L.	
	234	7305694		2007-12-04	COMMONS; Christopher et al.	
	235	7308188		2007-12-11	NAMATAME; Kazushi	
	236	7324857		2008-01-29	GODDARD; Mark D.	
	237	7356011		2008-04-08	WATERS; Christopher J. F. et al.	
	238	7366206		2008-04-29	LOCKRIDGE; Terry Wayne et al.	
	239	7391791		2008-06-24	BALASSANIAN; Edward et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	240	7428310		2008-09-23	PARK; Jeong-Hyun	
	241	7430181		2008-09-30	HONG; Jay Wu	
	242	7457948		2008-11-25	BILICKSA; Carl et al.	
	243	7472058		2008-12-30	TSENG; Wei-Hsin et al.	
	244	7483538		2009-01-27	MCCARTY; William A. et al.	
	245	7490044		2009-02-10	KULKARNI; Abhijit	
	246	7492912		2009-02-17	CHUNG; Yun M. et al.	
	247	7505889		2009-03-17	SALMONSEN; Daniel R. et al.	
	248	7519188		2009-04-14	BERARDI; William et al.	
	249	7539551		2009-05-26	KOMURA; Tatsumi [Jp] et al.	
	250	7548744		2009-06-16	OESTERLING; Christopher L. et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	251	7548851		2009-06-16	LAU; Jack et al.	
	252	7558224		2009-07-07	SURAZSKI; Luke K. et al.	
	253	7558635		2009-07-07	THIEL; Steffen et al.	
	254	7571014		2009-08-04	LAMBOURNE; Robert A [Us] et al.	
	255	7627825		2009-12-01	KAKUDA; Hiroshi	
	256	7630500		2009-12-08	BECKMAN; Paul E. et al.	
	257	7630501		2009-12-08	BLANK; William Tom [Us] et al.	
	258	7643894		2010-01-05	BRAITHWAITE; Michael et al.	
	259	7653344		2010-01-26	FELDMAN; Theodore Philip et al.	
	260	7657910		2010-02-02	MCAULAY; Roger [Us] et al.	
	261	7675943		2010-03-09	MOSIG; Rudiger et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	262	7676044		2010-03-09	SASAKI; Toru [Jp] et al.	
	263	7676142		2010-03-09	HUNG; Andy Chao	
	264	7688306		2010-03-30	WEHRENBERG; Paul J. et al.	
	265	7710941		2010-05-04	RIETSCHEL; Johannes et al.	
	266	7721032		2010-05-18	BUSHELL; John Samuel et al.	
	267	7728911		2010-06-01	LACY; Reed H. et al.	
	268	7746906		2010-06-29	JINZAKI; Akira et al.	
	269	7761176		2010-07-20	BEN-YAACOV YAACOV . et al.	
	270	7831054		2010-11-09	BALL; Steven J. et al.	
	271	7853341		2010-12-14	MCCARTY; William A. et al.	
	272	7882234		2011-02-01	WATANABE; Mitsuhiro et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	273	7908637		2011-03-15	KWON; Kwang H. et al.	
	274	7930644		2011-04-19	SILVA; Michael C. et al.	
	275	7933418		2011-04-26	MORISHIMA; Morito	
	276	7945636		2011-05-17	NELSON; Hortense Kathleen et al.	
	277	7945708		2011-05-17	OHKITA; Hideki	
	278	7966388		2011-06-21	PUGACZEWSKI; John T. et al.	
	279	7987294		2011-07-26	BRYCE; Stuart [Au] et al.	
	280	7995732		2011-08-09	KOCH; Robert et al.	
	281	8014423		2011-09-06	THALER; Thomas et al.	
	282	8041062		2011-10-18	COHEN; Ephram et al.	
	283	8045952		2011-10-25	QURESHEY; Safi et al.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	284	8050203		2011-11-01	JACOBSEN; Phillip et al.	
	285	8054987		2011-11-08	SEYDOUX; Henri	
	286	8055363		2011-11-08	LEE; Chang-Jin	
	287	8063698		2011-11-22	HOWARD; Damian	
	288	8103009		2012-01-24	MCCARTY; William A. et al.	
	289	8139774		2012-03-20	BERARDI; William et al.	
	290	8150079		2012-04-03	MAEDA; Kazuhiro et al.	
	291	8160281		2012-04-17	KIM; Young-Tae et al.	
	292	8170222		2012-05-01	DUNKO; Gregory A.	
	293	8175292		2012-05-08	AYLWARD; Jrichard [Us] et al.	
	294	8229125		2012-07-24	SHORT; William R.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	295	8233029		2012-07-31	YOSHIDA; Junji et al.	
	296	8233632		2012-07-31	MACDONALD; Andrew John et al.	
	297	8234395		2012-07-31	MILLINGTON; Nicholas A J [Us] et al.	
	298	8238578		2012-08-07	AYLWARD; J. Richard	
	299	8243961		2012-08-14	MORRILL; Daniel Lawrence	
	300	8265310		2012-09-11	BERARDI; William 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					

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]

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	1	2320451	CA	A1	2001-03-23	BONNEVILLE MARC ETIENNE [CA]		
	2	101667414	CN	A	2010-03-10	SONY CORP.		
	3	1598767	CN	A	2005-03-23	XIAO XUEWEN.		
	4	1871838	CN	A	2006-11-29	SANYO ELECTRIC CO.		
	5	0742674	EP	B1	2014-04-09	TOSHIBA KK [JP]		
	6	1124175	EP	A2	2001-08-16	NOKIA CORP [FI]		
	7	1133896	EP	B1	2002-08-28	BANG & OLUFSEN A/S.		
	8	1312188	EP	A1	2003-05-21	BRITISH TELECOMM [GB]		
	9	1389853	EP	A1	2004-02-18	SONY INT EUROPE GMBH.		
	10	1410686	EP		2008-03-26	DOLBY LAB LICENSING CORPORATION.		
	11	1416687	EP	B1	2006-08-02	AVID TECHNOLOGY, INC.		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	12	1517464	EP	A2	2005-03-23	PHOENIX GOLD INTERNATIONAL INC.		
	13	1825713	EP	B1	2012-10-17	BANG & OLUFSEN AS.		
	14	2860992	EP	A1	2015-04-15	SAMSUNG ELECTRONICS CO LTD [KR]		
	15	2379533	GB	A	2003-03-12	REQUEST MULTIMEDIA [US]		
	16	2000149391	JP	A	2000-05-30	VICTOR COMPANY OF JAPAN.		
	17	2001210019	JP	A	2001-08-03	KENWOOD CORP.		☒
	18	2002111817	JP		2002-04-12	NEC CORP.		☐
	19	2003045166	JP	A	2003-02-14	KENWOOD CORP.		☒
	20	2005136457	JP		2005-05-26	SANYO ELECTRIC CO. LTD.		☐
	21	2006054799	JP	A	2006-02-23	CASIO COMPUTER CO LTD.		☐
	22	2006217116	JP		2006-08-17	FUNAI ELECTRIC CO LTD.		☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	23	2007323789	JP		2007-12-13			☐
	24	2007336517	JP	A	2007-12-27	LG ELECTRONICS INC.		☐
	25	2009135750	JP		2009-06-18	KYOCERA CORP.		☐
	26	2011055043	JP	A	2011-03-17	CASIO HITACHI MOBILE COMM CO.		☐
	27	2011130496	JP		2011-06-30	TOSHIBA CORP.		☐
	28	63269633	JP		1988-11-07	UNKNOWN.		☐
	29	20040031853	KR		2004-04-14	MICRONIC SYSTEM CO LTD.		☒
	30	2015024881	WO		2015-02-26	BANG & OLUFSEN AS [DK]		☒
	31	439027	TW		2001-06-07	MITAC TECHNOLOGY CORP.		☐
	32	0019693	WO	A1	2000-04-06	WIRELESS SYSTEM TECHNOLOGIES I [CA], et al.		☐
	33	1999023560	WO		1999-05-14	COLLABORATION PROPERTIES, INC.		☐

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

	34	200153994	WO		2001-07-26	FRISKIT, INC.		☐
	35	2003093950	WO	A2	2003-11-13	GOLDBERG, BENJAMIN, M. et al.		☐
	36	2007135581	WO	A2	2007-11-29	KONINKL PHILIPS ELECTRONICS NV [NL], et al.		☐
	37	2008082350	WO	A1	2008-07-10	SCANIA CV ABP [SE], et al.		☐

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]
	1		

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	16166518
	Filing Date	2018-10-22
	First Named Inventor	MILLINGTON; Nicholas A.J.
	Art Unit	2656
	Examiner Name	MCCORD, Paul C.
	Attorney Docket Number	11-0403-CON1018

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	/Michael E. Coyne/	Date (YYYY-MM-DD)	2019-03-08
Name/Print	Michael E. Coyne	Registration Number	58443

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. 11-0403-CON1018)

In re the Application of:	)	
	)	
Sonos, Inc.	)	
	)	**Group Art Unit 2656**
Serial No.: 16/166,518	)	
	)	
Filed: October 22, 2018	)	
	)	**Examiner: Paul C. McCord**
Confirmation No. 7844	)	
	)	
For: Networked Playback Device	)	
	)	

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: March 8, 2019

By: /Michael E. Coyne/
Michael E. Coyne
Reg. No. 58,443
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9577
coyne @ls3ip.com

Electronic Acknowledgement Receipt	
EFS ID:	35358302
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Michael E. Coyne
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	11-MAR-2019
Filing Date:	22-OCT-2018
Time Stamp:	12:27:00
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	Foreign Reference	CA2320451A1.PDF	2348016 886d48985fac09d9e164460844f6ffb62cbae8d3	no	61
Warnings:					

Information:					
2	Foreign Reference	CN101667414A.PDF	2454551 c01cdd8f20eb219191d047bff85d245d28b65fffe	no	41
Warnings:					
Information:					
3	Foreign Reference	CN1598767A.PDF	20019126 3d9b02d6e3a548c43ff97598ffd71e5975399d48	no	18
Warnings:					
Information:					
4	Foreign Reference	CN1871838A.PDF	3130969 ceeb77e116a73b3eb125a53b03c79138afb31067	no	62
Warnings:					
Information:					
5	Foreign Reference	EP0742674B1.PDF	5626511 44cbbf2e5b4b7766e25423a7c4c4272ce46db063	no	107
Warnings:					
Information:					
6	Foreign Reference	EP1124175A2.PDF	1541375 04deaf98ac1643f0c34a5e24a0a75b7df119c4d5	no	29
Warnings:					
Information:					
7	Foreign Reference	EP1133896.PDF	384517 190512beff8ea78c0110d78d1207328f1d759700	no	8
Warnings:					
Information:					
8	Foreign Reference	EP1312188B1.PDF	1175411 76ee008b5907a0b079de8b97916462862bf68759	no	22
Warnings:					
Information:					

9	Foreign Reference	EP1389853A1.PDF	1133104 5b5f94b59082db3faa5f61e6a03a2576c8a47399	no	21
Warnings:					
Information:					
10	Foreign Reference	EP1410686.PDF	1218656 0186846328be480cb409b6ba6d441972ef64c66f	no	17
Warnings:					
Information:					
11	Foreign Reference	EP1416687B1.PDF	2226988 615f24870bcdb2a5fdf9aced55c38ec73adde684	no	39
Warnings:					
Information:					
12	Foreign Reference	EP1517464-V2.PDF	14927003 46e64310c4749690168bd3e1b8de42d30326d154	no	37
Warnings:					
Information:					
13	Foreign Reference	EP1825713B1.PDF	1056884 659c7839bc06b9a2dc4009a91889dea30a4e4163	no	25
Warnings:					
Information:					
14	Foreign Reference	EP2860992A1.PDF	1396587 593ebdf36febf5154b71fa6abf6f2be9e5da9870	no	45
Warnings:					
Information:					
15	Foreign Reference	GB2379533A.PDF	1396801 a26439e2db6f6c183a7fb12c7e8b2074853a297b	no	40
Warnings:					
Information:					

16	Foreign Reference	JP2000149391.PDF	502149 26b08e237f101717605ce2a98520fa4c7b63d0fb	no	10
Warnings:					
Information:					
17	Foreign Reference	JP2001210019A_EFS.PDF	1310104 3b7b78d719013eec2feacdf637937a2fb5278a57	no	10
Warnings:					
Information:					
18	Foreign Reference	JP2002-111817_EFS.PDF	1257794 3d40587cd556374f08d7a24dce1cd5341f42768c	no	23
Warnings:					
Information:					
19	Foreign Reference	JP2003045166A_EFS.PDF	1619702 953131f2a3fa19e54d00ebd4c686a4c18e60b612	no	12
Warnings:					
Information:					
20	Foreign Reference	JP2005-136457_EFS.PDF	500771 6bd05fde776373b1e0285d145896f1c124e01ac4	no	13
Warnings:					
Information:					
21	Foreign Reference	JP2006-54799.PDF	1014418 4400086c4a095be12f1a94464bc3822c8c7a5def	no	34
Warnings:					
Information:					
22	Foreign Reference	JP2006217116_EFS.PDF	873683 7db40f3069d030c68da0a4304f28f375ece1673a	no	15
Warnings:					
Information:					

23	Foreign Reference	JP2007323789_EFS.PDF	1007209 4c23292945cb0739b8de38f63b6b4cceeb859393	no	16
Warnings:					
Information:					
24	Foreign Reference	JPA_2007336517.PDF	479974 10609e1d9ffc24a6fce5d94508f46f97a0295329	no	14
Warnings:					
Information:					
25	Foreign Reference	JP2009-135750_EFS.PDF	898894 56c3b9f4768ca88451df9e194ed0014a034bc1dd	no	18
Warnings:					
Information:					
26	Foreign Reference	JP2011055043.PDF	1234762 8195d9e13699c4b9c9729b09eb7459a95fcffc49	no	25
Warnings:					
Information:					
27	Foreign Reference	JP2011-130496_EFS.PDF	558338 0e00194241fac1e7fd7510c43a4b4c3704790df9	no	12
Warnings:					
Information:					
28	Foreign Reference	JP63269633.PDF	873462 b98faac4f170b698f2d534c3fc18503e58233d80	no	7
Warnings:					
Information:					
29	Foreign Reference	KR20040031853A_EFS.PDF	1071220 c94c28a6017a50af01621fbfd9cce4151b361477	no	9
Warnings:					
Information:					

30	Foreign Reference	WO2015024881.PDF	1373269 1f1d64487a5f30f64d2052865e157c629f050910	no	28
Warnings:					
Information:					
31	Foreign Reference	TW439027.PDF	924565 5941c824259d4ff874f61a57547d58c5dbb16dad	no	21
Warnings:					
Information:					
32	Foreign Reference	WO2000019693.PDF	1693361 46a45ae609ad520061da42ce819a15f7600ee6d1	no	38
Warnings:					
Information:					
33	Foreign Reference	WO1999023560.PDF	8501071 052d2aeca1b4d36613c68b08b4b83fcbdbcfaa46	no	208
Warnings:					
Information:					
34	Foreign Reference	WO0153994_EFS.PDF	5933951 f022864d4a3282c77262376253e553bf82be463b	no	124
Warnings:					
Information:					
35	Foreign Reference	WO2003093950A2.PDF	7382515 c2230b06f8f9c6abae7af849b7f54a1b1eaa04e7	no	147
Warnings:					
Information:					
36	Foreign Reference	WO2007135581A2.PDF	1027402 74775785e488515e2fcb8e7a5102e9f18cd59150	no	19
Warnings:					
Information:					

37	Foreign Reference	WO2008082350A1.PDF	837564 5c10dac2e1b463b41ea0fb6fb3c9ce2d804a33a1	no	23
Warnings:					
Information:					
38	Information Disclosure Statement (IDS) Form (SB08)	11-0403-CON1018_0_IDS_20190306170447.pdf	1063135 a0c20e370be447146fa0a18ccd3394d32d81edca	no	34
Warnings:					
Information:					
39	Transmittal Letter	Sonos_IDS_Transmittal.pdf	70048 0768f026f36e5dd6dcdf322ed07a1121fe084083	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	102045860		

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.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 16/166,518

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	660
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760
TOTAL CLAIMS (37 CFR 1.16(i))	20 minus 20 =	*			OR	x 100 =	0.00
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3 minus 3 =	*				x 460 =	0.00
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).						0.00
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	1720

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** 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 found in the appropriate box in column 1.

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 NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
16/166,518	10/22/2018	2688	1880	11-0403-CON1018 (15-1433)	20	3

CONFIRMATION NO. 7844

UPDATED FILING RECEIPT

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

OC000000105137189

Date Mailed: 01/16/2019

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Nicholas A.J. Millington, Santa Barbara, CA;
Tom Cullen, Santa Barbara, CA;
Robert Reimann, Santa Barbara, CA;
Brent Lehman, Santa Barbara, CA;

Applicant(s)

Sonos, Inc., Santa Barbara, CA;

Power of Attorney: The patent practitioners associated with Customer Number 107361

Domestic Priority data as claimed by applicant

This application is a CON of 15/583,553 05/01/2017 PAT 10108393
which is a CON of 14/628,999 02/23/2015 PAT 9686606
which is a CON of 14/561,421 12/05/2014 PAT 9681223
which is a CON of 13/089,167 04/18/2011 PAT 8938312

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 11/08/2018

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/166,518**

Projected Publication Date: 04/25/2019

Non-Publication Request: No

Early Publication Request: No

Title

Networked Playback Device

Preliminary Class

369

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Sonos No. 11-0403-CON1018
(MBHB 15-1433-US-CON4)

In the Application of:	)	
	)	
Millington	)	Examiner: to be assigned
	)	
Application No.: 16/166,518	)	Art Unit: 2688
	)	
Filed: October 22, 2018	)	Confirmation No. 7844
	)	
Title: Networked Playback Device	)	
	)	

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

PRELIMINARY AMENDMENT

Please enter the present preliminary amendment prior to examination of the above-captioned application.

AMENDMENTS TO THE CLAIMS begin on page 2.

REMARKS begin on page 8.

Applicant believes no fees are required. Nevertheless, Applicant authorizes and requests the Office to charge any fee due or credit any overpayment to Deposit Account 13-2490.

AMENDMENTS TO THE CLAIMS

1. (New) A playback device comprising:

one or more processors; and

tangible, non-transitory computer readable memory comprising instructions stored therein, wherein the instructions, when executed, cause the playback device to perform a method comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

2. (New) The playback device of claim 1, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.

3. (New) The playback device of claim 1, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

4. (New) The playback device of claim 1, wherein playing the second type of media content comprises playing the second type of media content in synchrony with a second playback device.

5. (New) The playback device of claim 1, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

6. (New) The playback device of claim 1, wherein playing the second type of media content comprises transmitting at least a portion of the second type of media content to a third playback device.

7. (New) The playback device of claim 1, wherein playing the first type of media content comprises transmitting at least a portion of the first type of media content to at least one of a second playback device or a third playback device.

8. (New) The playback device of claim 1, wherein the first type of media content comprises media content received from a video device.

9. (New) Tangible, non-transitory computer-readable media comprising instructions encoded therein, wherein the instructions, when executed by a playback device, cause the playback device to perform functions comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

10. (New) The tangible, non-transitory computer-readable media of claim 9, wherein determining that the playback device is receiving the first type of media content comprises

determining that the playback device is receiving the first type of media content via a line-in connector.

11. (New) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

12. (New) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

13. (New) The tangible, non-transitory computer-readable media of claim 9, wherein playing the second type of media content comprises transmitting at least a portion of the second type of media content to a third playback device.

14. (New) The tangible, non-transitory computer-readable media of claim 9, wherein playing the first type of media content comprises transmitting at least a portion of the first type of media content to at least one of a second playback device or a third playback device.

15. (New) The tangible, non-transitory computer-readable media of claim 9, playback device of claim 1, wherein the first type of media content comprises media content received from a video device.

16. (New) A method performed by a playback device, the method comprising:

arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;

after arming the playback device, playing the second type of media content;

while playing the second type of media content, determining that the playback device is receiving the first type of media content;

in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content;

determining that the playback device is no longer receiving the first type of media content; and

in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.

17. (New) The method of claim 16, wherein determining that the playback device is receiving the first type of media content comprises determining that the playback device is receiving the first type of media content via a line-in connector.

18. (New) The method of claim 16, wherein playing the second type of media content comprises receiving the second type of media content via at least one of a wireless or a wired network interface.

19. (New) The method of claim 16, wherein playing the second type of media content comprises playing the second type of media content in synchrony with a second playback device.

20. (New) The method of claim 16, wherein playing the second type of media content comprises receiving the second type of media content from an Internet-accessible media source.

LINKPLAY EXHIBIT 1002
Page 1198 of 1292

REMARKS

Applicant has added new claims 1-20. The subject matter of the amendments can be found generally throughout Applicant's originally-filed specification, including but not limited to FIG. 11 and paragraphs 133-136. No new matter has been added.

If further discussion would advance the application to allowance and issue, the Examiner is invited to telephone the undersigned at 312-913-3381.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: January 14, 2019 By: /Margot M. Wilson/
Margot M. Wilson
Reg. No. 77,094

Electronic Acknowledgement Receipt	
EFS ID:	34848120
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Margot Maureen Wilson
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018 (15-1433)
Receipt Date:	14-JAN-2019
Filing Date:	22-OCT-2018
Time Stamp:	16:26:39
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		Sonos_11-0403-CON1018_MBHB_15-1433-US-CON4_Preliminary_Amendment.pdf	115983 57e76a7f29c7b24f16e6ba39d180dd8d72daec60	yes	8

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Preliminary Amendment	1	1
	Claims	2	7
	Applicant Arguments/Remarks Made in an Amendment	8	8
Warnings:			
Information:			
	Total Files Size (in bytes):	115983	

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.

Document code: WFEE

United States Patent and Trademark Office
Sales Receipt for Accounting Date: 01/16/2019

MNGUYEN SALE #00000019 Mailroom Dt: 01/14/2019 132490 16166518
01 FC : 1051 160.00 DA

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 NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
16/166,518	10/22/2018	2688	1720	11-0403-CON1018 (15-1433)		

CONFIRMATION NO. 7844

FILING RECEIPT

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

OC000000103720388

Date Mailed: 11/13/2018

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

Inventor(s)

Nicholas A.J. Millington, Santa Barbara, CA;
Tom Cullen, Santa Barbara, CA;
Robert Reimann, Santa Barbara, CA;
Brent Lehman, Santa Barbara, CA;

Applicant(s)

Sonos, Inc., Santa Barbara, CA;

Power of Attorney: The patent practitioners associated with Customer Number 107361

Domestic Priority data as claimed by applicant

This application is a CON of 15/583,553 05/01/2017 PAT 10108393
which is a CON of 14/628,999 02/23/2015 PAT 9686606
which is a CON of 14/561,421 12/05/2014 PAT 9681223
which is a CON of 13/089,167 04/18/2011 PAT 8938312

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see http://www.uspto.gov for more information.) - None.
Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 11/08/2018

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/166,518**

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

Early Publication Request: No

Title

Networked Playback Device

Preliminary Class

369

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER

Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

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 U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit http://www.SelectUSA.gov or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD

Substitute for Form PTO-875

Application or Docket Number: 16/166,518

APPLICATION AS FILED - PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY FEE($)
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300
SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A			N/A	660
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760
TOTAL CLAIMS (37 CFR 1.16(i))	0 minus 20=	*			OR	x 100 =	0.00
INDEPENDENT CLAIMS (37 CFR 1.16(h))	0 minus 3 =	*				x 460 =	0.00
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).						0.00
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	1720

APPLICATION AS AMENDED - PART II

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	SMALL ENTITY RATE($)	SMALL ENTITY ADDITIONAL FEE($)	OR	OTHER THAN SMALL ENTITY RATE($)	OTHER THAN SMALL ENTITY ADDITIONAL FEE($)
AMENDMENT A	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE($)	ADDITIONAL FEE($)		RATE($)	ADDITIONAL FEE($)
AMENDMENT B	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))									
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** 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 found in the appropriate box in column 1.

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 NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/166,518	10/22/2018	Nicholas A.J. Millington	11-0403-CON1018 (15-1433)

CONFIRMATION NO. 7844

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

FORMALITIES LETTER

OC000000103720369

Date Mailed: 11/13/2018

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

Items Required To Avoid Abandonment:

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The specification does not include at least one claim.
  A complete specification as prescribed by 35 U.S.C. 112 is required.
  Applicant must submit at least one claim. If more than 3 independent claims, more than 20 total claims, and/or a multiple dependent claim are submitted, excess claims fees are required at the time of submission of such claims (see 37 CFR 1.16(h)-(j)).
- Surcharge as set forth in 37 CFR 1.16(f) must be submitted.
  The surcharge is due for any one of:
  - late submission of the basic filing fee, search fee, or examination fee,
  - late submission of inventor's oath or declaration,
  - filing an application that does not contain at least one claim on filing, or
  - submission of an application filed by reference to a previously filed application.

SUMMARY OF FEES DUE:

The fee(s) required within **TWO MONTHS** from the date of this Notice to avoid abandonment is/are itemized below. No entity status discount is in effect. If applicant is qualified for small entity status, a written assertion of small entity status must be submitted to establish small entity status. (See 37 CFR 1.27). If applicant is qualified for micro entity status, an acceptable Certification of Micro Entity Status must be submitted to establish micro entity status. (See 37 CFR 1.29 and forms PTO/SB/15A and 15B.)

- $ **160** surcharge.
- $(**0**) previous unapplied payment amount.
- $ **160** TOTAL FEE BALANCE DUE.

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice". https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at http://www.uspto.gov/ebc.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/tqlam/

PTO/AIA/80 (07-12)
Approved for use through 11/30/2014. OMB 0651-0035
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.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

☒ Practitioners associated with Customer Number: 107361

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

☒ The address associated with Customer Number: 107361

OR

☐	Firm or Individual Name			
	Address			
	City		State	Zip
	Country			
	Telephone		Email	

Assignee Name and Address: Sonos, Inc, 223 E. De La Guerra St.
Santa Barbara, CA 93101

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature	[signature]	Date	10/2/2012
Name	Mark Triplett	Telephone	(805) 965-3001
Title	Director, IP		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. 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 3 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.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:	Networked Playback Device			
First Named Inventor/Applicant Name:	Nicholas A.J. Millington			
Filer:	Jeffrey Armstrong			
Attorney Docket Number:	11-0403-CON1018			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	**Fee Code**	**Quantity**	**Amount**	**Sub-Total in USD($)**
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	300	300
UTILITY SEARCH FEE	1111	1	660	660
UTILITY EXAMINATION FEE	1311	1	760	760
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**1720**

Electronic Acknowledgement Receipt	
EFS ID:	34073965
Application Number:	16166518
International Application Number:	
Confirmation Number:	7844
Title of Invention:	Networked Playback Device
First Named Inventor/Applicant Name:	Nicholas A.J. Millington
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	11-0403-CON1018
Receipt Date:	22-OCT-2018
Filing Date:	
Time Stamp:	13:55:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1720
RAM confirmation Number	102318INTEFSW13563600
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	Application Data Sheet	11-0403-CON1018_ADS.pdf	117432 2dce6b82378fcfbff65805fc79de88eb6b21594b	no	7
Warnings:					
Information:					
This is not an USPTO supplied ADS fillable form					
2		11-0403-CON1018_Application.pdf	4412960 f82f4610732fefaf1b4c800f7df13d3baeea142d	yes	66

Multipart Description/PDF files in .zip description		
Document Description	**Start**	**End**
Drawings-only black and white line drawings	45	66
Abstract	44	44
Specification	1	43

Warnings:					
Information:					
3	Oath or Declaration filed	11-0403-CON1018_Declaration.pdf	6792115 eae26511b52fea4e20b5d5111b873d8ec7a94633	no	4
Warnings:					
Information:					
4	Power of Attorney	11-0403-CON1018_POA.pdf	1944464 ade76fa5c9b3383e33d47c5ca4ad824868eb1113	no	1
Warnings:					
Information:					

5	Fee Worksheet (SB06)	fee-info.pdf	35055 14c0709c01a02ffceaf3ccb409009675c23d52fd	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	13302026	

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.

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.
This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.

Secrecy Order 37 CFR 5.2:

☐ Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)

Inventor Information:

Inventor 1 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Nicholas	A.J.	Millington	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Santa Barbara	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	614 Chapala Street		
Address 2			
City	Santa Barbara	State/Province	CA
Postal Code	93101	Country	US

Inventor 2 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Tom		Cullen	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

City	Santa Barbara	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	614 Chapala Street		
Address 2			
City	Santa Barbara	State/Province	CA
Postal Code	93101	Country	US

Inventor 3 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Robert		Reimann	

Residence Information (Select One) ◉ US Residency ○ Non US Residency ○ Active US Military Service

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

City	Santa Barbara	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	614 Chapala Street		
Address 2			
City	Santa Barbara	State/Province	CA
Postal Code	93101	Country	US

Inventor 4 Remove

Legal Name

Prefix	Given Name	Middle Name	Family Name	Suffix
	Brent		Lehman	

Residence Information (Select One) (•) US Residency ( ) Non US Residency ( ) Active US Military Service

City	Santa Barbara	State/Province	CA	Country of Residence	US

Mailing Address of Inventor:

Address 1	614 Chapala Street		
Address 2			
City	Santa Barbara	State/Province	CA
Postal Code	93101	Country	US

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button. Add

Correspondence Information:

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ **An Address is being provided for the correspondence Information of this application.**

Customer Number	107361		
Email Address	docketing@mbhb.com	Add Email	Remove Email

Application Information:

Title of the Invention	Networked Playback Device		
Attorney Docket Number	11-0403-CON1018 (15-1433)	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	22	Suggested Figure for Publication (if any)	

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32).
Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	◉ Customer Number	○ US Patent Practitioner	○ Limited Recognition (37 CFR 11.9)
Customer Number	107361		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.
When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)
	Continuation of	15/583553	2017-05-01

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
15/583553	Continuation of	14/628999	2015-02-23	9686606	2017-06-20
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14/628999	Continuation of	14/561421	2014-12-05	9681223	2017-06-13
Prior Application Status	Patented			Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
14/561421	Continuation of	13/089167	2011-04-18	8938312	2015-01-20

Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the **Add** button.

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)[i] the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Remove

Application Number	Country[i]	Filing Date (YYYY-MM-DD)	Access Code[i] (if applicable)

Additional Foreign Priority Data may be generated within this form by selecting the **Add** button.

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.
NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant 1

If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.

Clear

◉ Assignee	○ Legal Representative under 35 U.S.C. 117	○ Joint Inventor
○ Person to whom the inventor is obligated to assign.	○ Person who shows sufficient proprietary interest	

If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:

Name of the Deceased or Legally Incapacitated Inventor:

If the Applicant is an Organization check here. ☒

Organization Name	Sonos, Inc.		
Mailing Address Information For Applicant:			
Address 1	614 Chapala Street		
Address 2			
City	Santa Barbara	**State/Province**	CA
Country	US	Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Applicant Data may be generated within this form by selecting the Add button.

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

PTO/AIA/14 (11-15)
Approved for use through 04/30/2017. OMB 0651-0032
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.

Application Data Sheet 37 CFR 1.76	Attorney Docket Number	11-0403-CON1018 (15-1433)
	Application Number	
Title of Invention	Networked Playback Device	

Assignee 1

Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.

If the Assignee or Non-Applicant Assignee is an Organization check here. ☐

Prefix	**Given Name**	Middle Name	**Family Name**	Suffix

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1			
Address 2			
City		**State/Province**	
Country i		Postal Code	
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). **However, if this Application Data Sheet is submitted with the INITIAL filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).**

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Jeffrey P. Armstrong/			Date (YYYY-MM-DD)	2018-10-22
First Name	Jeffrey	Last Name	Armstrong	Registration Number	54,967

Additional Signature may be generated within this form by selecting the Add button.

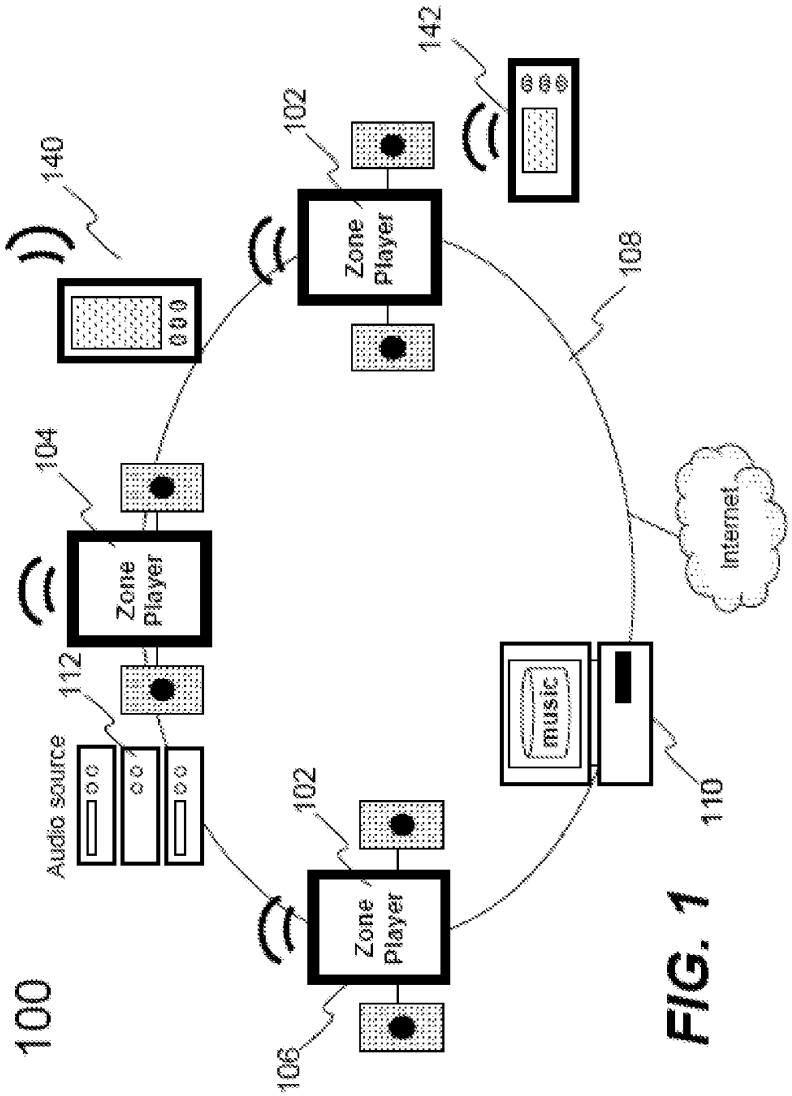

100
Zone Player
102
Zone Player
104
Zone Player
106
140
142
108
Internet
music
110
112
Audio source

FIG. 1

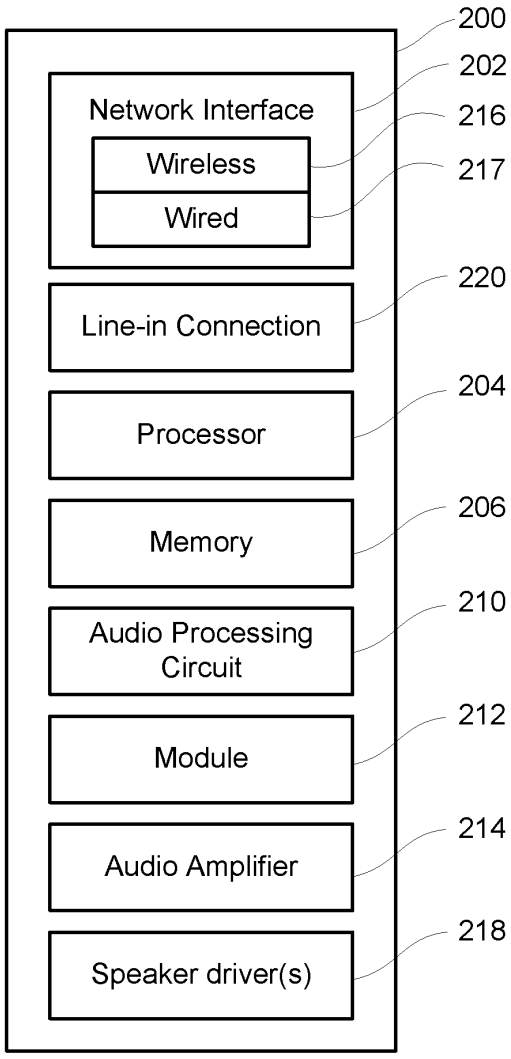

200
202
Network Interface
216
Wireless
217
Wired
220
Line-in Connection
204
Processor
206
Memory
210
Audio Processing Circuit
212
Module
214
Audio Amplifier
218
Speaker driver(s)

FIG. 2A

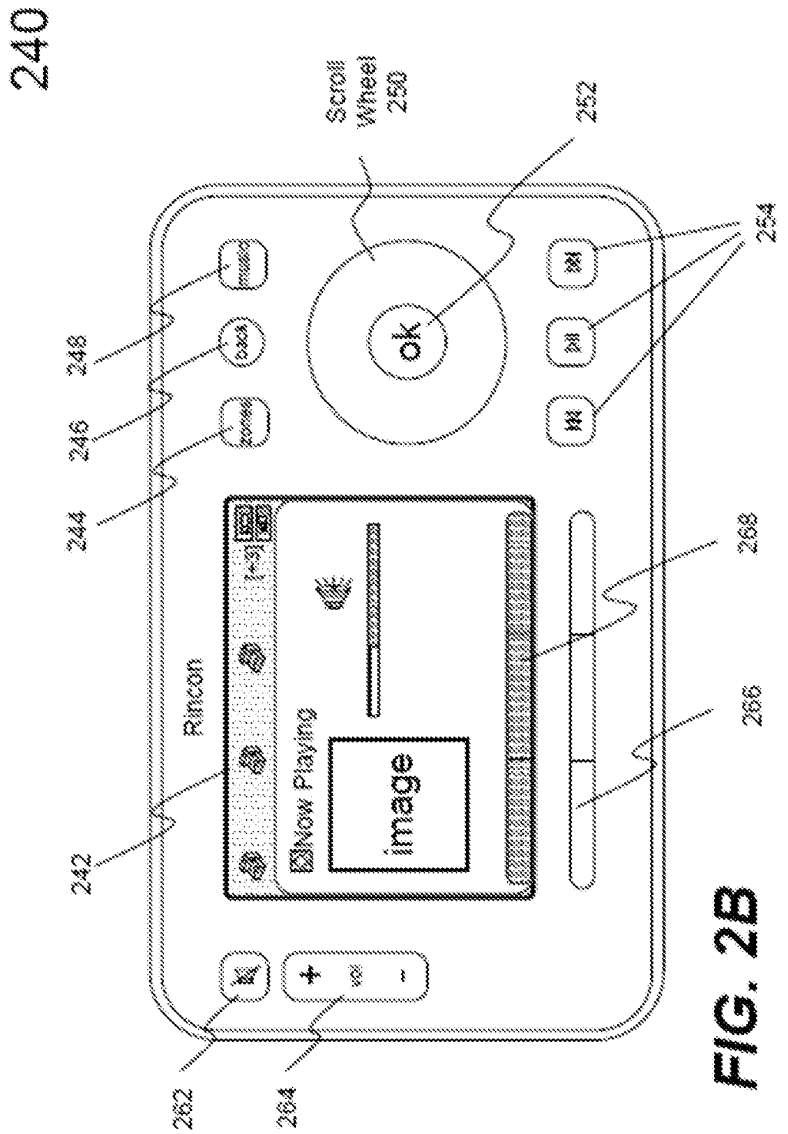
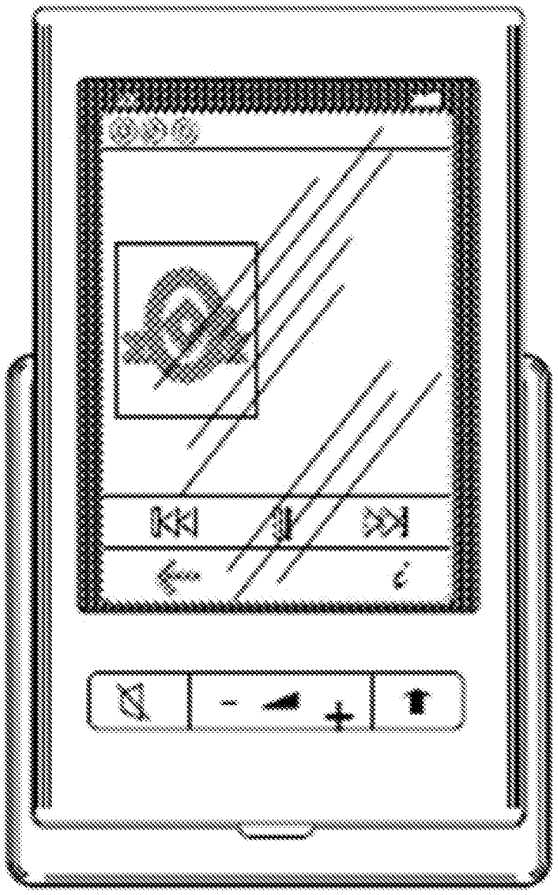

240
Scroll Wheel 250
252
254
248
246
244
242
262
264
266
268
ok
Rincon
Now Playing
image

FIG. 2B



260

FIG. 2C

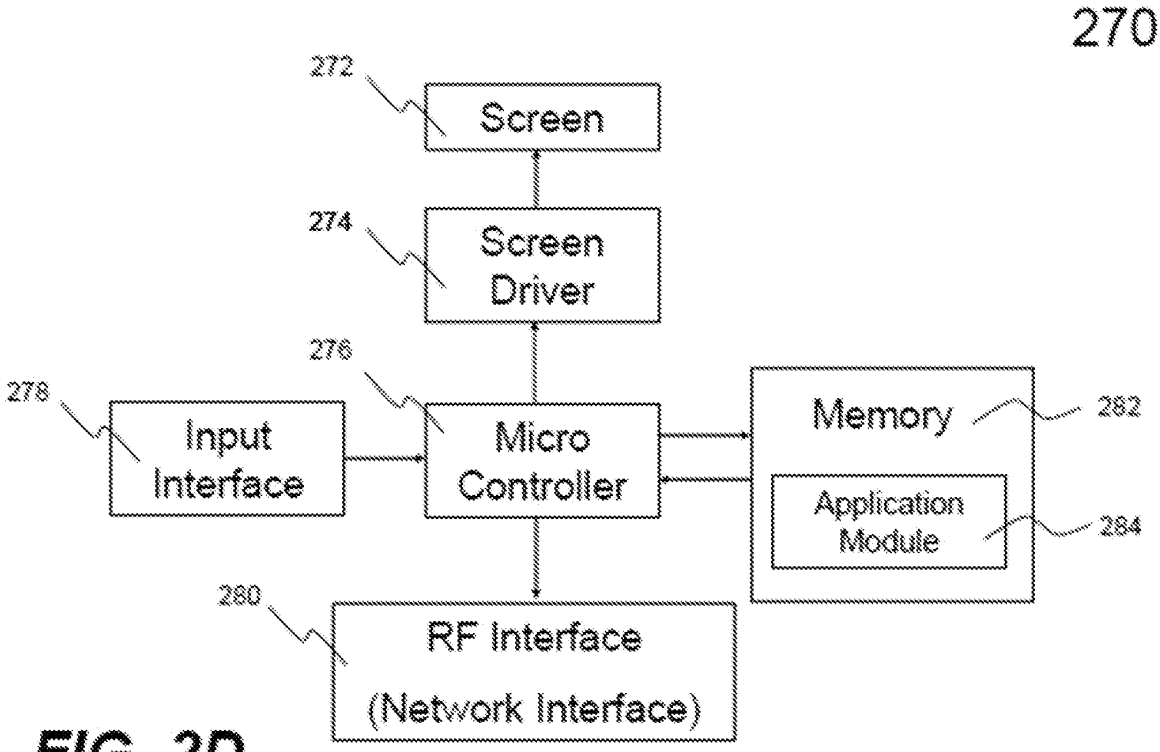

270
272
Screen
274
Screen Driver
276
278
Input Interface
Micro Controller
Memory
282
Application Module
284
280
RF Interface
(Network Interface)

FIG. 2D

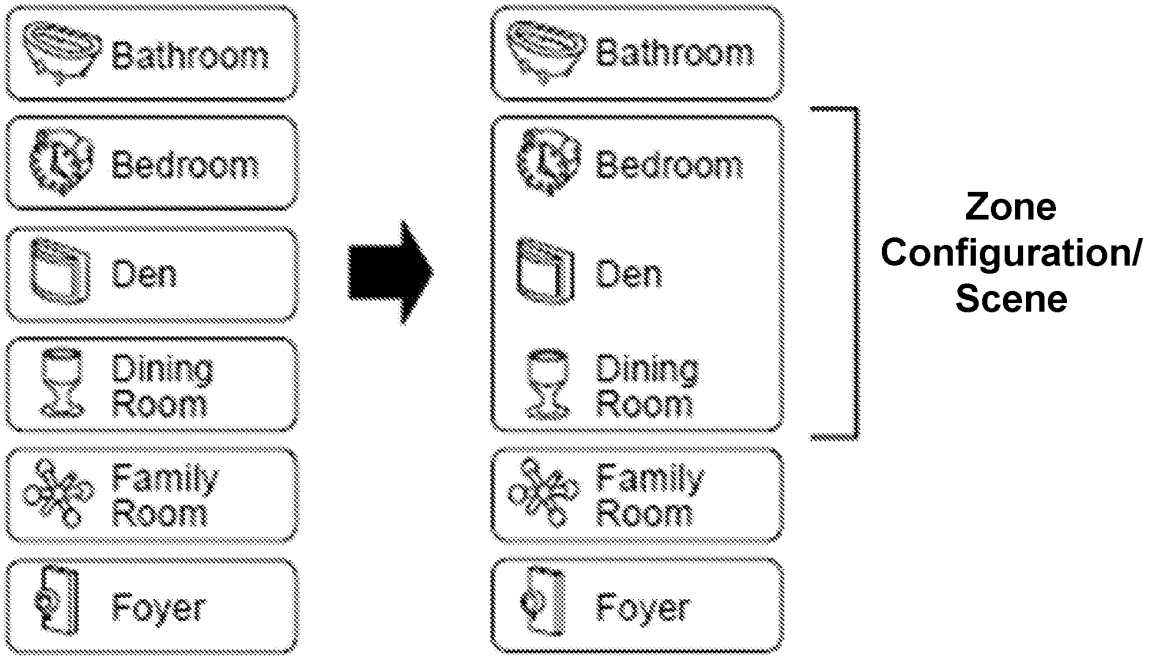

Bathroom
Bedroom
Den
Dining Room
Family Room
Foyer
Bathroom
Bedroom
Den
Dining Room
Family Room
Foyer
Zone Configuration/ Scene

FIG. 3A

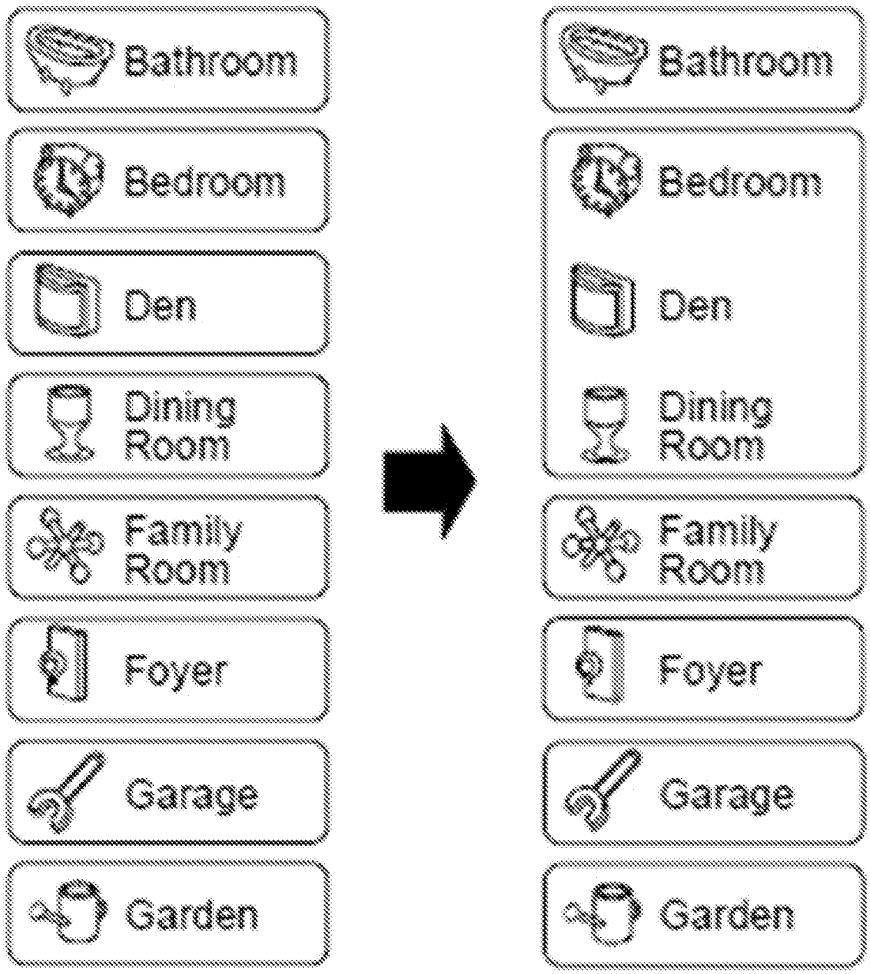

Bathroom
Bedroom
Den
Dining Room
Family Room
Foyer
Garage
Garden
Bathroom
Bedroom
Den
Dining Room
Family Room
Foyer
Garage
Garden

FIG. 3B

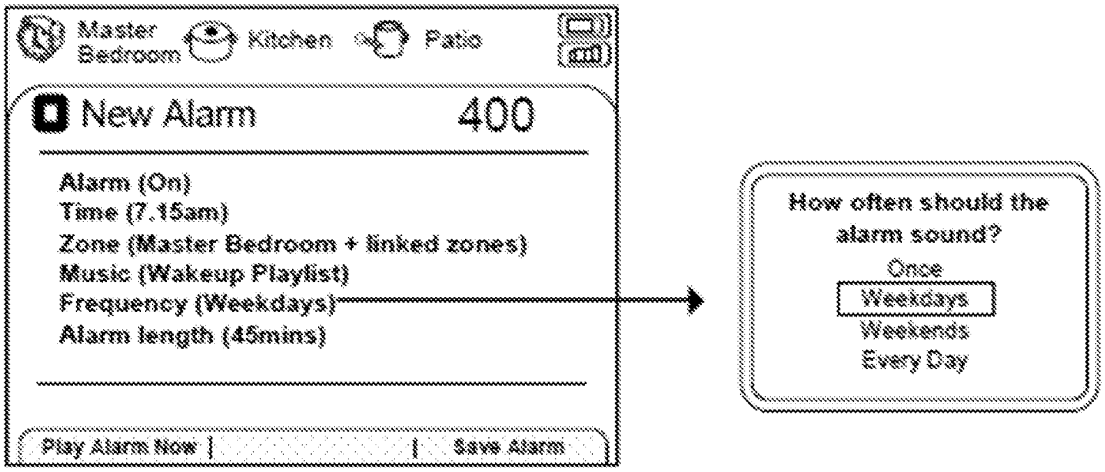

Master Bedroom
Kitchen
Patio
New Alarm
400
Alarm (On)
Time (7.15am)
Zone (Master Bedroom + linked zones)
Music (Wakeup Playlist)
Frequency (Weekdays)
Alarm length (45mins)
Play Alarm Now
Save Alarm
How often should the alarm sound?
Once
Weekdays
Weekends
Every Day

FIG. 4

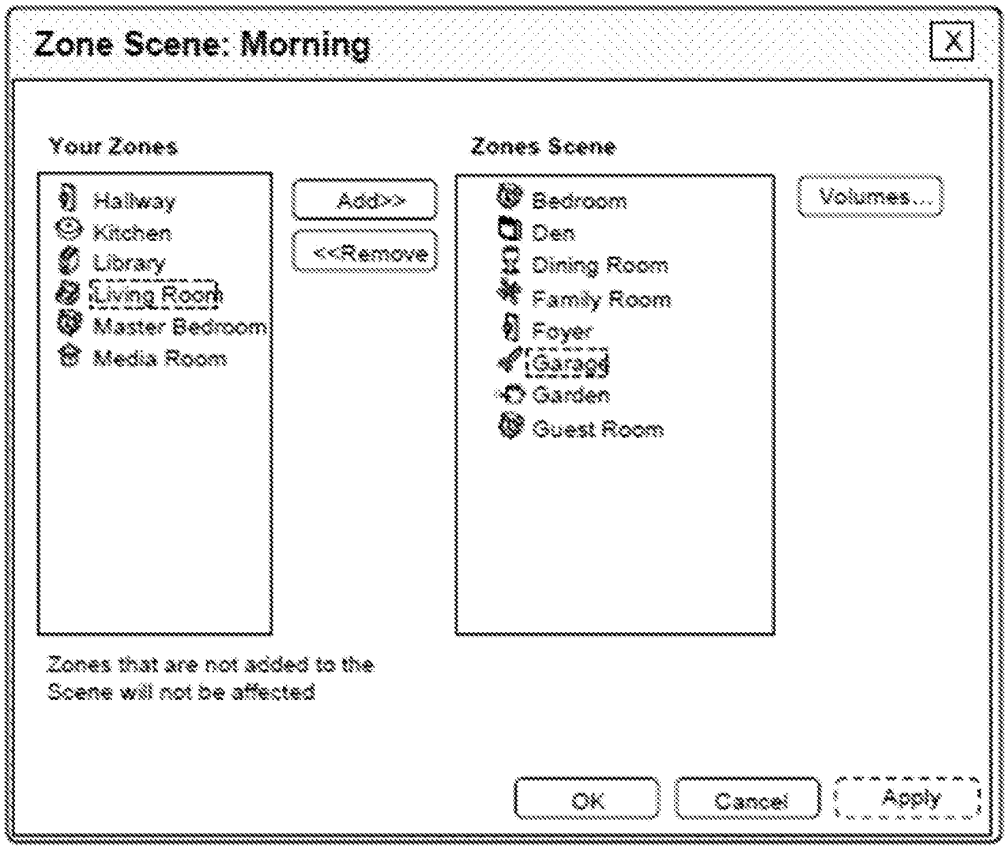

Zone Scene: Morning
X
500
Your Zones
Zones Scene
Hallway
Kitchen
Library
Living Room
Master Bedroom
Media Room
Add>>
<<Remove
Bedroom
Den
Dining Room
Family Room
Foyer
Garage
Garden
Guest Room
Volumes...
Zones that are not added to the Scene will not be affected
OK
Cancel
Apply

FIG. 5A

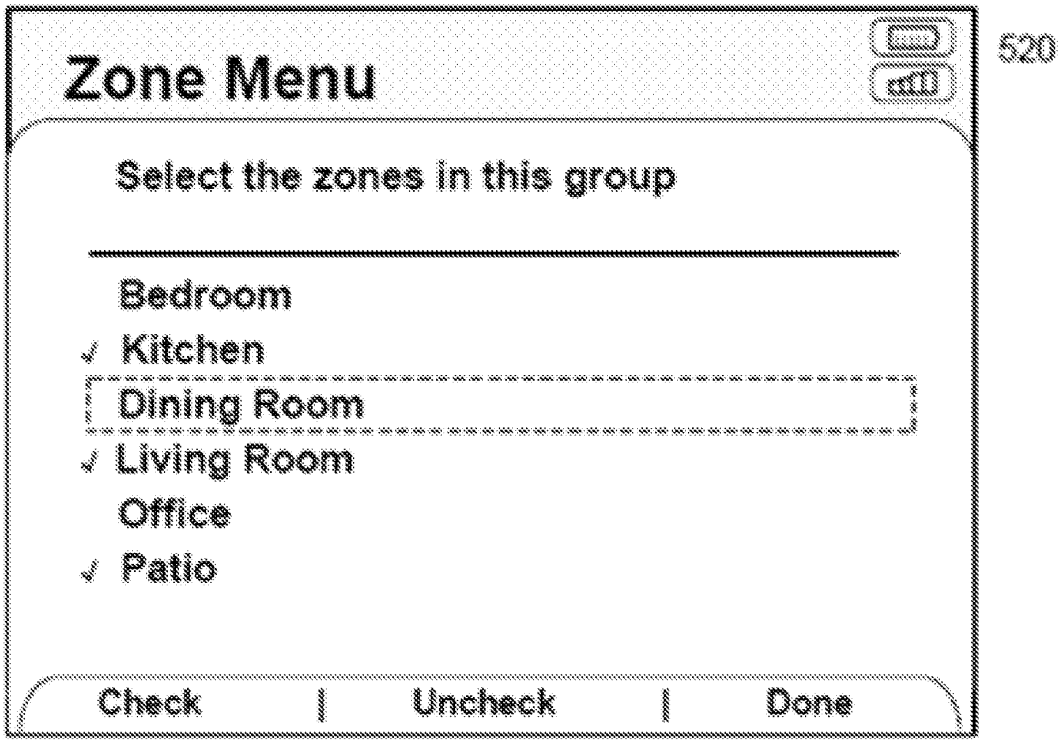

Zone Menu
520
Select the zones in this group
Bedroom
✓ Kitchen
Dining Room
✓ Living Room
Office
✓ Patio
Check | Uncheck | Done

FIG. 5B

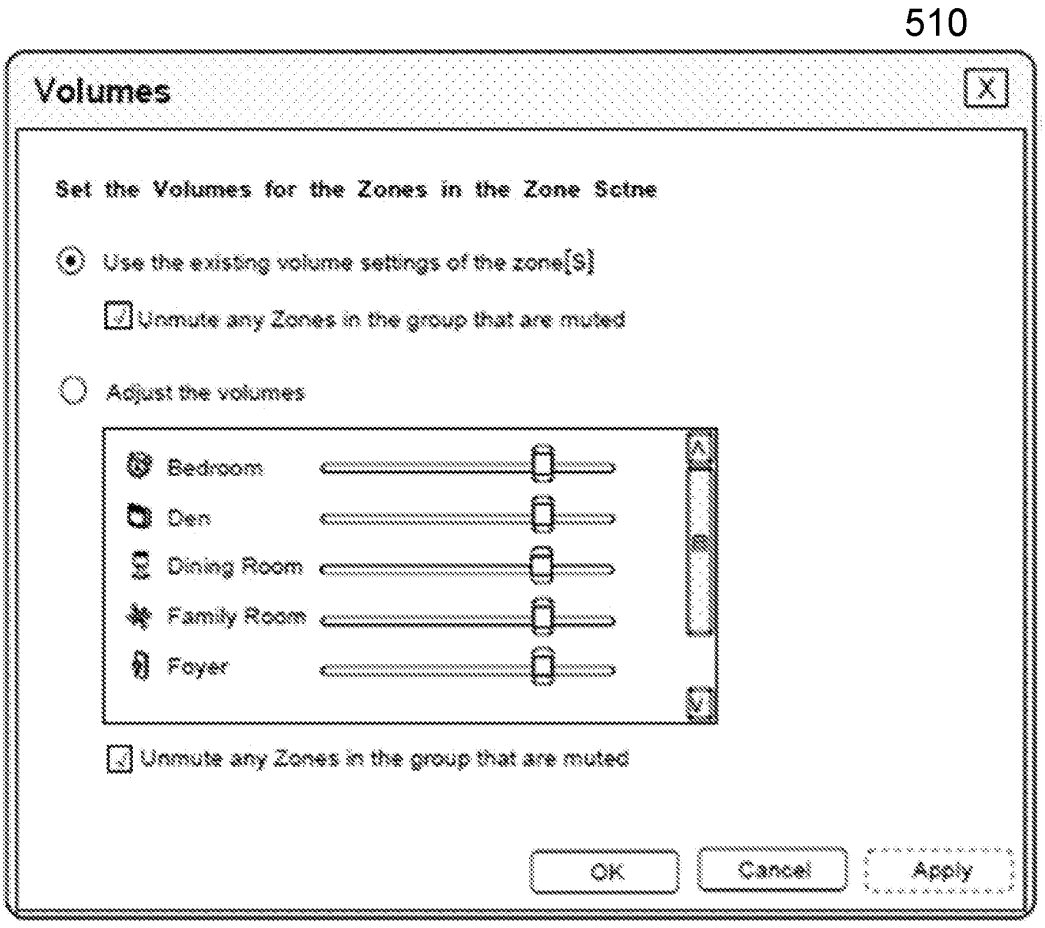

510
Volumes
Set the Volumes for the Zones in the Zone Scene
Use the existing volume settings of the zone(s)
Unmute any Zones in the group that are muted
Adjust the volumes
Bedroom
Den
Dining Room
Family Room
Foyer
Unmute any Zones in the group that are muted
OK
Cancel
Apply

FIG. 5C

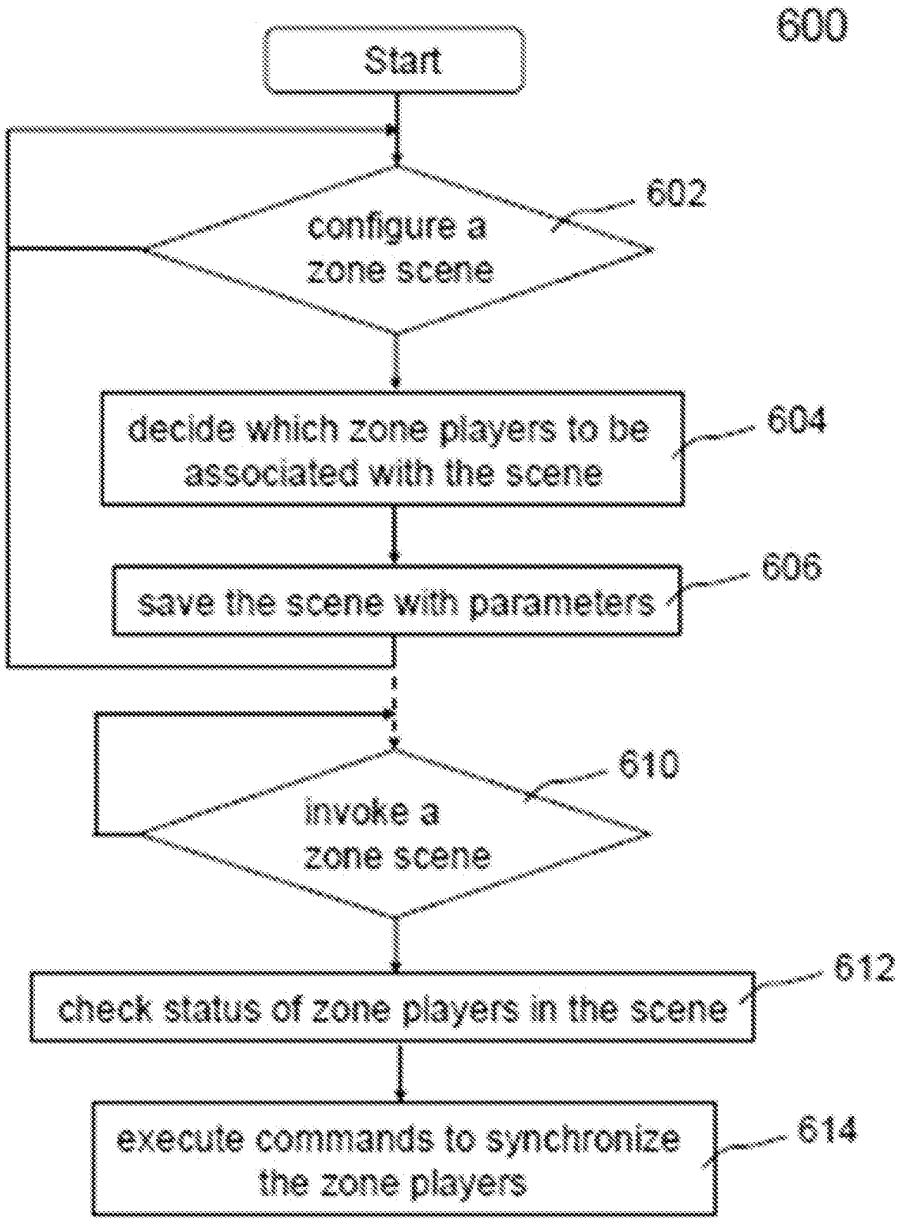

600
Start
configure a zone scene
602
decide which zone players to be associated with the scene
604
save the scene with parameters
606
invoke a zone scene
610
check status of zone players in the scene
612
execute commands to synchronize the zone players
614

FIG. 6

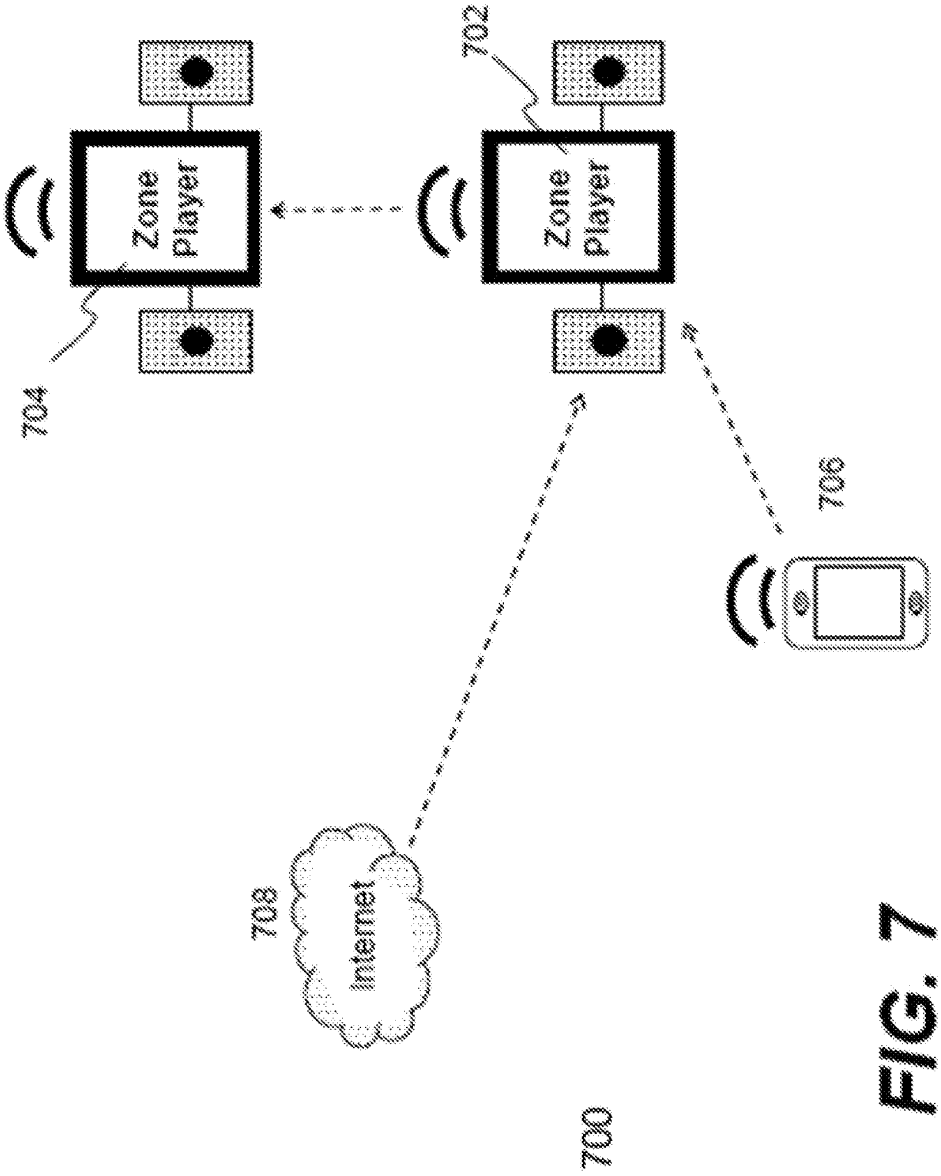


FIG. 7

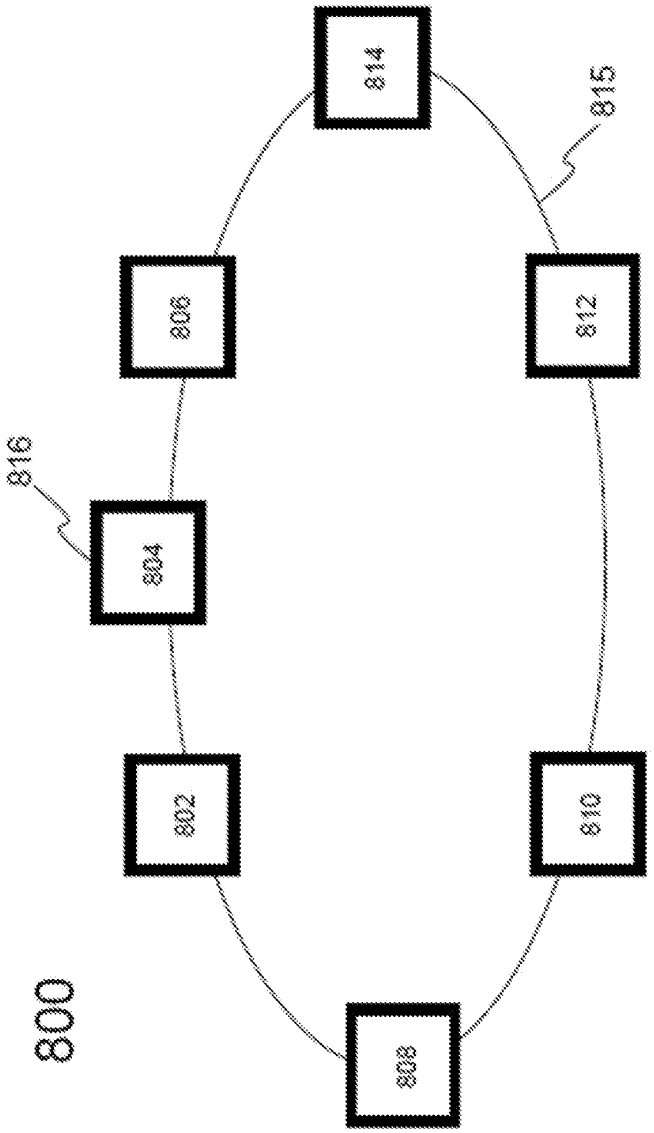


FIG. 8

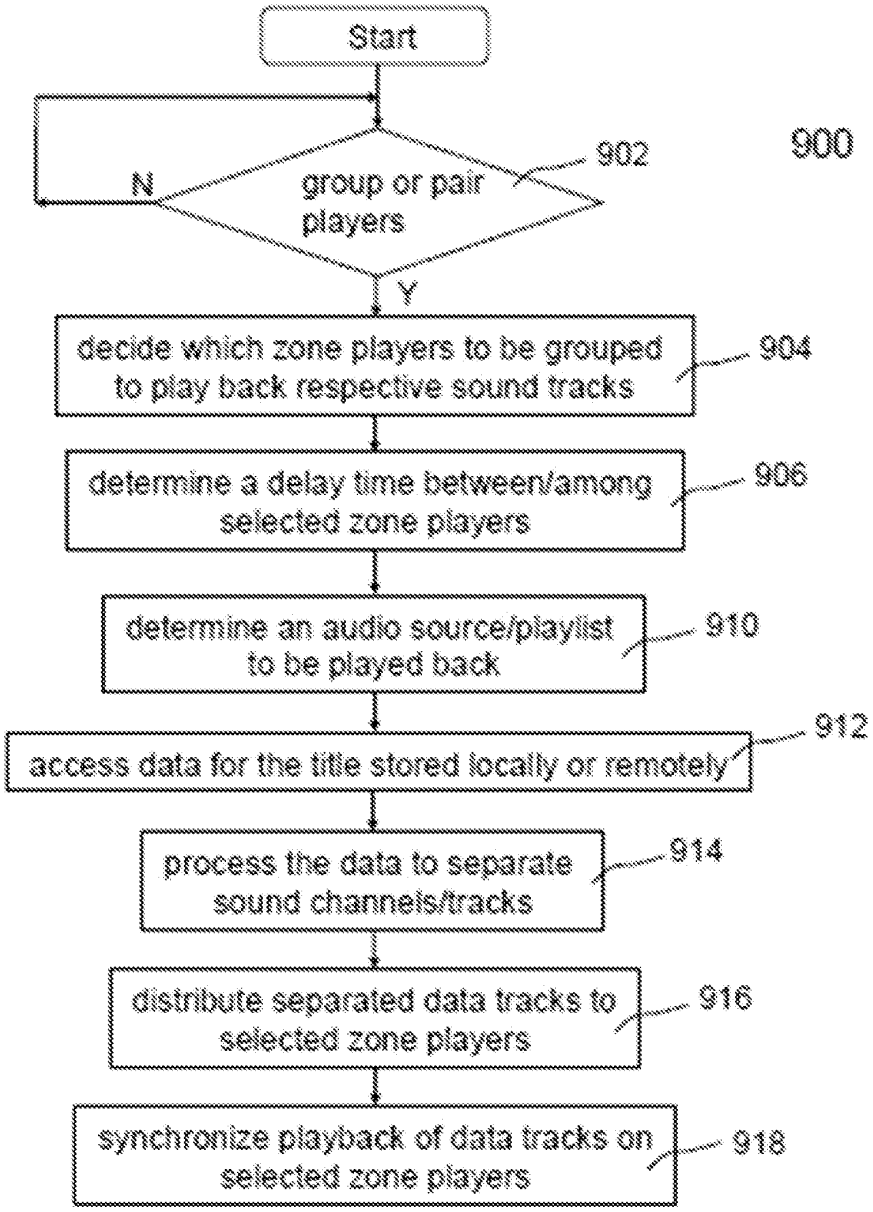

Start
900
902
group or pair players
N
Y
decide which zone players to be grouped to play back respective sound tracks
904
determine a delay time between/among selected zone players
906
determine an audio source/playlist to be played back
910
912
access data for the title stored locally or remotely
process the data to separate sound channels/tracks
914
distribute separated data tracks to selected zone players
916
synchronize playback of data tracks on selected zone players
918

FIG. 9

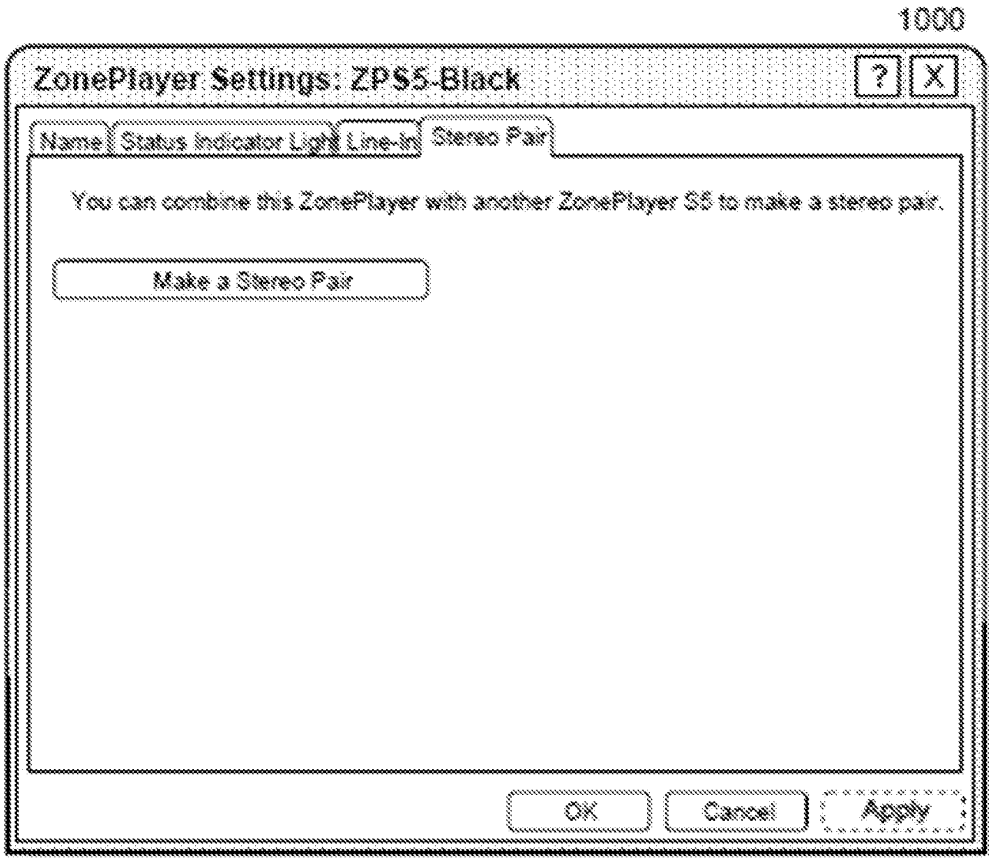

1000
ZonePlayer Settings: ZPS5-Black
?
X
Name
Status Indicator Light
Line-in
Stereo Pair
You can combine this ZonePlayer with another ZonePlayer S5 to make a stereo pair.
Make a Stereo Pair
OK
Cancel
Apply

FIG. 10A

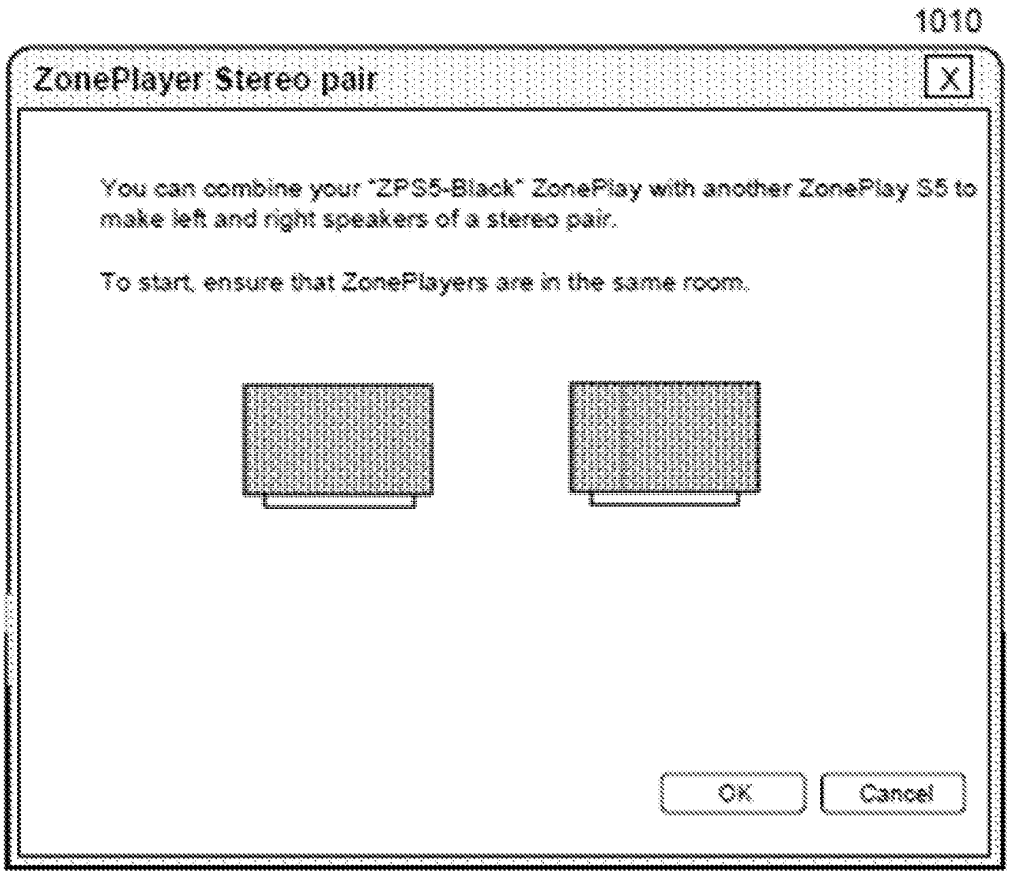

1010
ZonePlayer Stereo pair
X
You can combine your "ZPS5-Black" ZonePlay with another ZonePlay S5 to make left and right speakers of a stereo pair.
To start, ensure that ZonePlayers are in the same room.
OK
Cancel

FIG. 10B

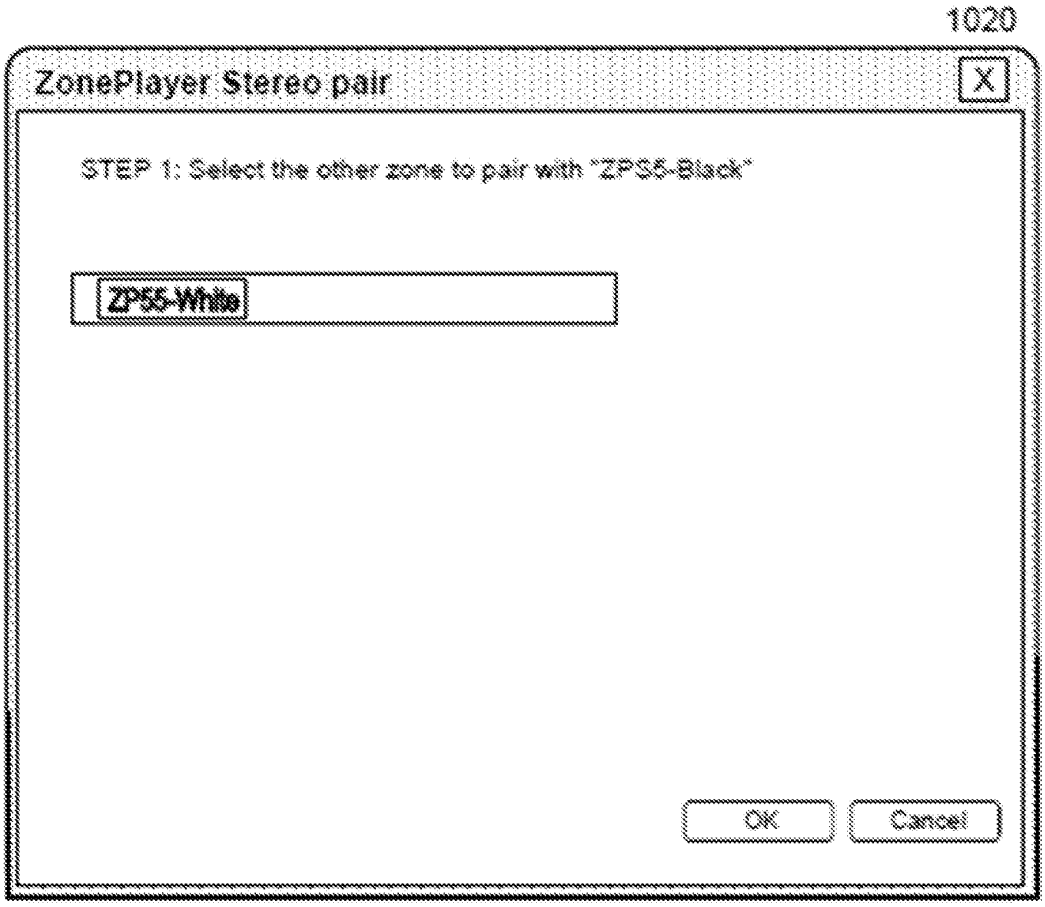

1020
ZonePlayer Stereo pair
X
STEP 1: Select the other zone to pair with "ZPS5-Black"
ZPS5-White
OK
Cancel

FIG. 10C

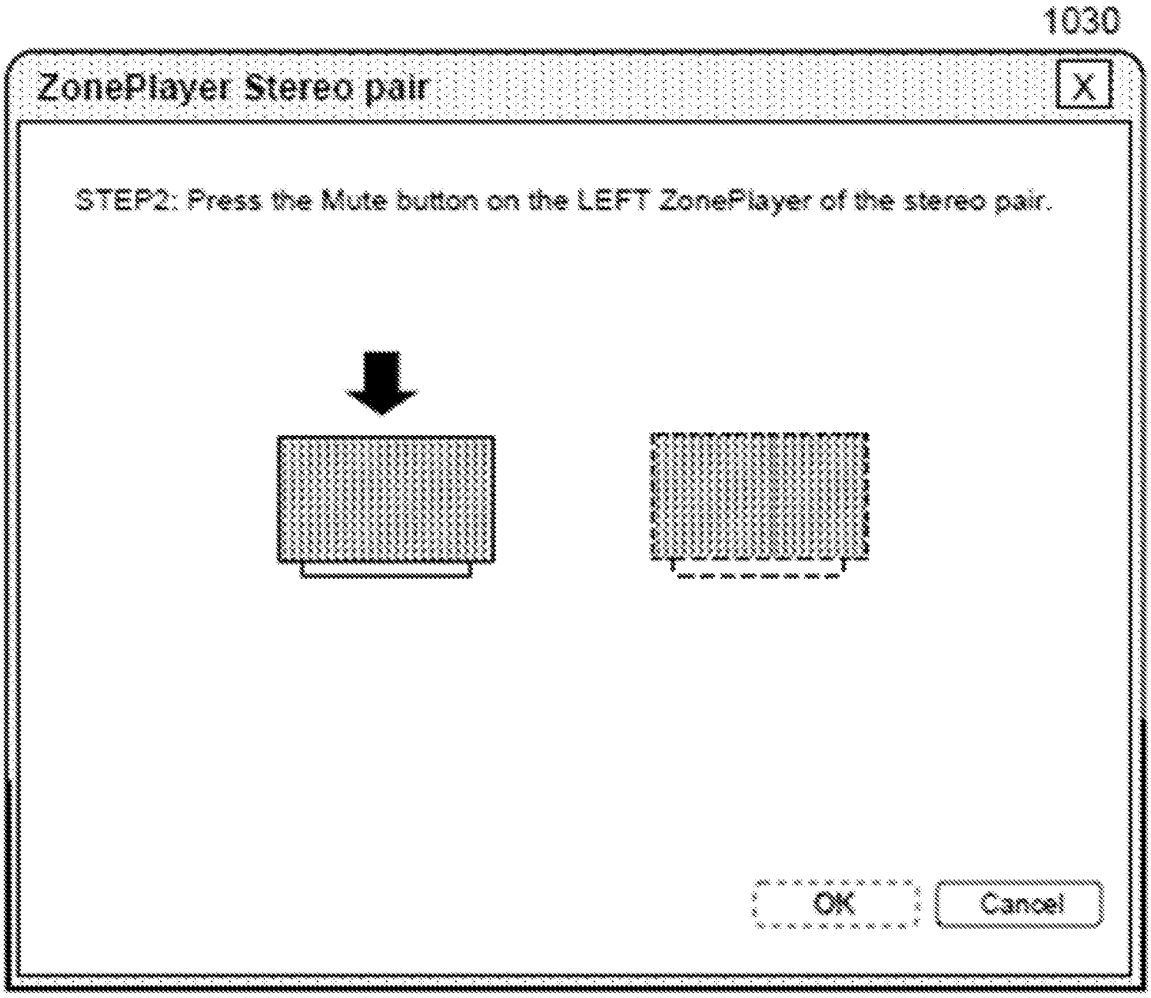

1030
ZonePlayer Stereo pair
X
STEP2: Press the Mute button on the LEFT ZonePlayer of the stereo pair.
OK
Cancel

FIG. 10D

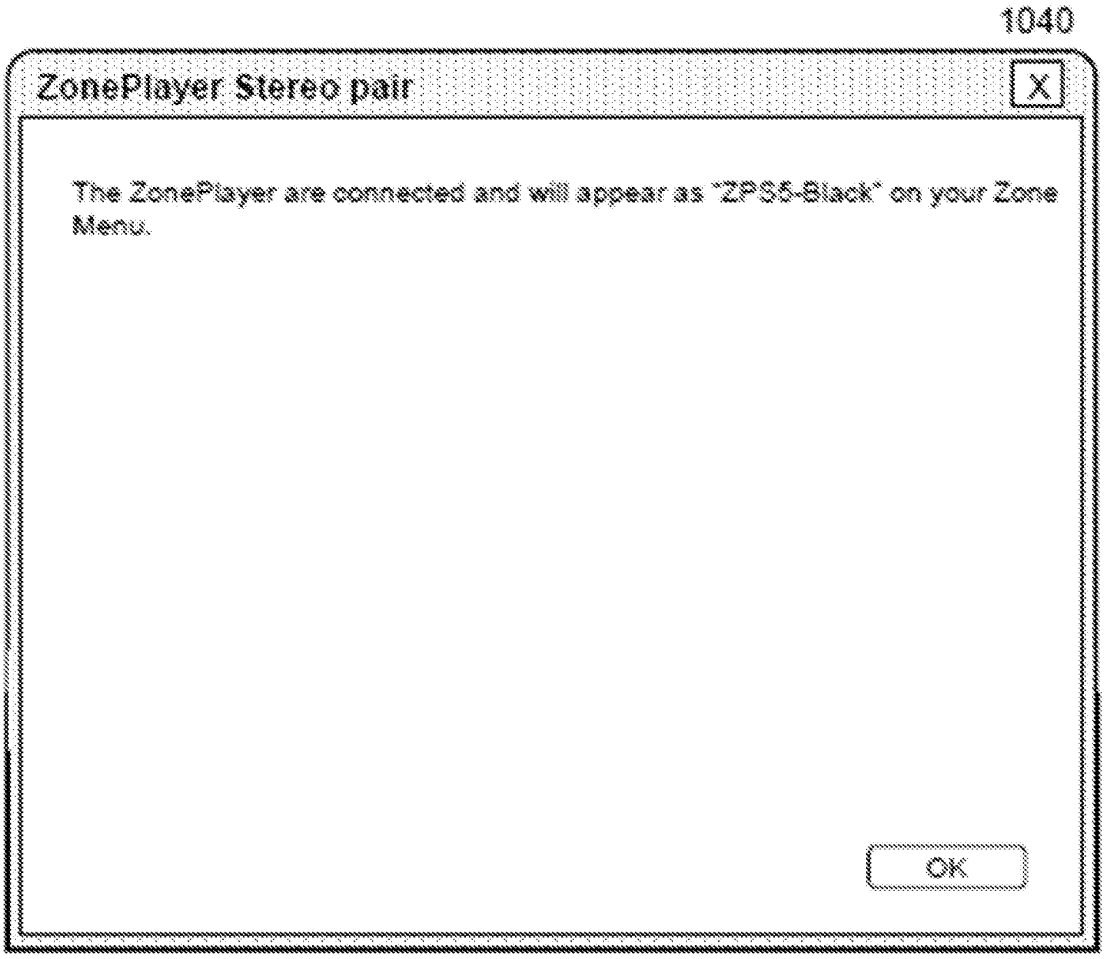

1040
ZonePlayer Stereo pair
X
The ZonePlayer are connected and will appear as "ZPS5-Black" on your Zone Menu.
OK

FIG. 10E

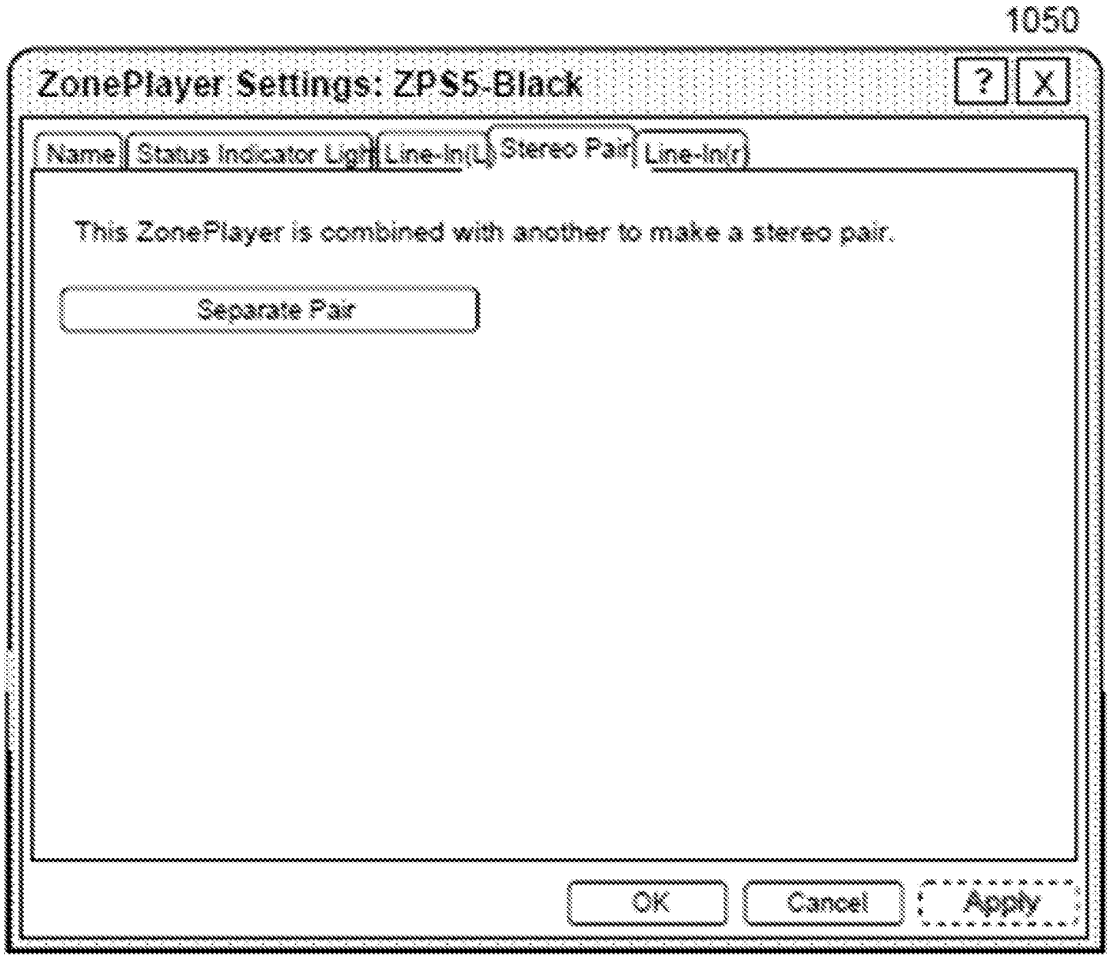

1050
ZonePlayer Settings: ZPS5-Black
?
X
Name
Status Indicator Light
Line-in(L)
Stereo Pair
Line-in(r)
This ZonePlayer is combined with another to make a stereo pair.
Separate Pair
OK
Cancel
Apply

FIG. 10F

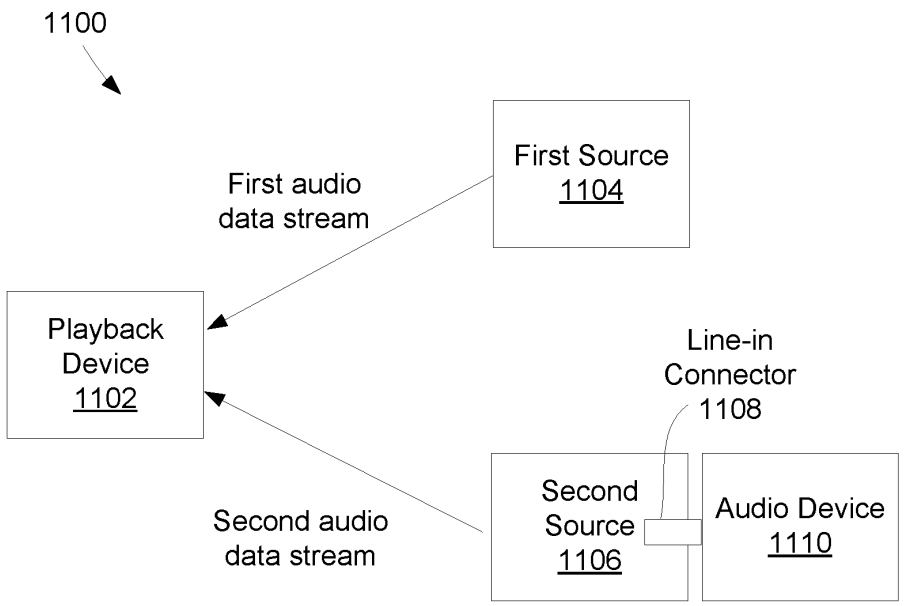


FIG. 11

LINKPLAY EXHIBIT 1002
Page 1244 of 1292

Abstract

An example playback device includes a first interface for receiving a first audio signal from a first audio source; a second interface for receiving a second audio signal from a second audio source; and a processor configured to: cause the playback device to playback the second audio signal; determine that the first audio signal is present at the first interface; in response to determining that the first audio signal is present at the first interface, (i) cease playback of the second audio signal being played by the playback device and (ii) cause the playback device to playback the first audio signal; receive an instruction to stop the playback device from playing the first audio signal while the first audio signal is still present at the first interface; and arm the playback device such that a subsequent presence of the first audio signal at the first interface causes the playback device to play the first audio signal.

LINKPLAY EXHIBIT 1002
Page 1245 of 1292

UNITED STATES PATENT & TRADEMARK OFFICE
(Docket No. 11-0403-CON1018
(15-1433-US-CON4)

Title: Networked Playback Device

Inventors: Nicholas A.J. Millington
Tom Cullen
Robert Reimann
Brent Lehman

Correspondence: McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive, Suite 3200
Chicago, IL 60606
Phone: 312-913-0001
Fax: 312-913-0002
email: docketing@mbhb.com

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application is a continuation of U.S. App. 15/583,553 titled "Leaving Group and Smart In-Line Processing," filed on May 1, 2017, and currently pending; U.S. App. 15/583,553 is a continuation of U.S. App. 14/628,999 titled "Smart Line-in Processing," filed on February 23, 2015, and issued on June 20, 2017, as U.S. Pat. 9,686, 606; U.S. App. 14/628,999 is a continuation of U.S. App. 14/561,421 titled "Smart Line-In Processing in a Group" filed on December 5, 2014, and issued on June 13, 2017, as U.S. Pat. 9,681,223; U.S. App. 14/561,421 is a continuation of U.S. App. 13/089,167 titled "Smart Line-In Processing" filed on April 18, 2011, and issued on January 20, 2015, as U.S. Pat. 8,938,312. The entire contents of U.S. Apps. 15/583,553; 14/628,999; 14/561,421; and 13/089,167 are incorporated herein by reference.

BACKGROUND

[0002] The presently described technology is directed towards technology for use in the area of consumer electronics. In particular, certain embodiments are directed to smart line-in processing for use in an audio environment.

[0003] Music is very much a part of our everyday lives. And thanks to the advancement of technology, music content is now more accessible than ever. The same can be said of other types of media, such as television, movies, and other audio and video content. In fact, now a user can even access the content over the Internet through an online store, an Internet radio station, online music service, online movie service, and the like, in addition to the more traditional means of accessing audio and video content.

[0004] The demand for such audio and video content continues to surge. Given the high demand over the years, technology used to access and play such content has likewise improved. Even still, technology used in accessing the content and the play back of such content can be significantly improved or developed in ways that the market or end users may not anticipate.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] These and other features, aspects, and advantages of the presently described technology will become better understood by a person skilled in the art with regard to the following description, appended claims, and accompanying drawings where:

[0011] FIG. 1 shows an illustrative configuration in which certain embodiments may be practiced;

[0012] FIG. 2A shows an illustrative functional block diagram of a player in accordance with certain embodiments;

[0013] FIG. 2B shows an example of a controller that may be used to remotely control one or more players of FIG. 2A;

[0014] FIG. 2C shows an example of a controller that may be used to remotely control one or more players of FIG. 2A;

[0015] FIG. 2D shows an example internal functional block diagram of a controller in accordance with certain embodiments;

[0016] FIG. 3A provides an illustration of a zone scene configuration;

[0017] FIG. 3B shows that a user defines multiple groups to be gathered at the same time;

[0018] FIG. 4 shows an example user interface that may be displayed on a controller or a computer of FIG. 1;

[0019] FIG. 5A shows an example user interface to allow a user to form a scene;

[0020] FIG. 5B shows another example user interface to allow a user to form a scene;

[0021] FIG. 5C shows an example user interface to allow a user to adjust a volume level of the zone players in a zone scene individually or collectively;

[0022] FIG. 6 shows a flowchart or process of providing a player theme or a zone scene for a plurality of players, where one or more of the players are placed in a zone;

[0023] FIG. 7 shows an illustrative configuration in which an audio source is played back on two players in accordance to an embodiment;

[0024] FIG. 8 shows an illustrative configuration of a pairing amongst multiple players in accordance to an embodiment;

[0025] FIG. 9 shows a flowchart or process of grouping a plurality of audio products to play separated sound tracks in synchronization to simulate a multi-channel listening environment;

[0026] FIGS. 10A to 10F show example snapshots of a controller used in certain embodiments; and

[0027] FIG. 11 shows an illustrative configuration of smart in-line processing, in accordance with certain embodiments.

[0028] In addition, the drawings are for the purpose of illustrating certain embodiments, but it is understood that the inventions are not limited to the arrangements and instrumentality shown in the drawings.

DETAILED DESCRIPTION

I. Overview

[0029] The embodiments described herein relate to smart line-in processing. The embodiments are particularly useful in a networked environment where a playback device is capable of playing audio data from two or more different sources, and at least one of the sources receives its audio data from an audio device via a line-in connection. An advantage of certain embodiments described herein, among many other advantages, is that a listener can control the audio device itself and let the system detect a line-in signal and automatically switch the source of the playback device to play from the audio device. As such, the listener does not have to manually switch the source of the playback device before playing the audio device. Another advantage of certain embodiments described herein is that the system may allow the listener to switch the playback device to a different source even while the line-in signal is still present. Yet another advantage of certain embodiments described herein is that the system is capable of rearming itself such that the system can switch the source back to the audio device, should the system once again detect the line-in signal. The embodiments may also find utility in connection with any environment for which multi-source playback is desired.

[0030] In certain embodiments, a playback device is idle and therefore not producing sound or the playback device is configured to receive and play a first audio data stream from a first source. The playback device is further capable to receive and play a second audio data stream from a second source. The second source is coupled to an audio device through a line-in connector on the second source. A listener commands the audio device to play audio. The second source is configured, such that when a signal is detected on the line-in connector, the second source automatically switches the playback device to play audio from the audio device via the second audio data stream. The switch to play audio from the audio device may optionally be performed only after the second source detects a signal on the line-in connector for a threshold

time. The playing of the second audio data stream may override the playing of the first audio data stream. The playback device and any of the first source and second source may be components of a single apparatus, or the playback device may be separate from any of the first source and second source and communicate with one another, such as over a network.

[0031] In certain embodiments, a playback device is configured to receive and play audio from a source, where the source receives the audio from an audio device coupled to the source via a line-in connector. During play of the audio from the audio device, a listener commands the playback device to play a new audio data stream from a different source. Upon receipt of the command, the playback device switches to play the new audio data stream. The playback device subsequently instructs the source to stop sending the audio of the audio device to the playback device. The source stops sending the audio to the playback device and waits until it no longer detects a signal on its line-in connector for an interval of time. When a signal is not detected on the line-in connector for the interval of time, the source is ready to automatically switch the playback device to play audio from the audio device, should the source once again detect a signal on its line-in connector. The playback device and any of the source and the different source may be components of a single apparatus, or the playback device may be separate from any of the source and the different source and communicate with one another, such as over a network.

[0032] In certain embodiments, the playback device is configured to output audio data according to a first volume level. When the playback device is automatically switched to play audio from a new source, where the new source receives the audio from an audio device coupled to the new source via a line-in connector, the volume of the playback device is modified to a second volume level. The second volume level is set such that increased dynamic range is given to a volume control of the audio device connected via line-in to the new source. When the playback device switches to play audio from a source that is different from the new source having the line-in connector, the volume of the playback device is returned to a safe volume level such that the audio is not played back to the listener at a high level.

[0033] In certain embodiments, a playback device comprises a network interface, a processor, and optionally, any of: an amplifier and a speaker driver. The network interface may be configured to receive and transmit audio data over a network. The amplifier, if the playback device is so equipped, powers the optional speaker driver. The processor processes audio data to be sent to another device for actual playback, output through the speaker driver if the playback device is so configured, or both. The playback device further comprises a line-in connector for receiving audio from an audio device. The playback device may implement automatic source switching, such that when a signal is detected on the line-in connector, the playback device automatically triggers the audio from the audio device to be played by the playback device itself, to be played by another device in communication with this playback device, or by both. The automatic switch to play audio from the audio device may optionally be performed only after a signal is detected on the line-in connector for a threshold time.

[0034] In certain embodiments, a playback device comprises a network interface, a processor, an amplifier, and a speaker driver. The network interface may be configured to receive and transmit audio data over a network. The amplifier powers the speaker driver. The processor processes audio data to be output through the speaker driver. The playback device may be automatically switched to play streaming audio data that is received from a source device. The source device includes a line-in connector, through which an audio device is connected. When a signal is detected on the line-in connector of the source device, thereby indicating that a listener wishes to hear audio from the audio device, the playback device receives a command from the source device to automatically play the streaming audio data from the audio device. The automatic switch to play audio from the audio device may optionally be performed only after a signal is detected on the line-in connector for a threshold time.

[0035] These embodiments and many additional embodiments are described more below. Further, the detailed description is presented largely in terms of illustrative environments, systems, procedures, steps, logic blocks, processing, and other symbolic representations that

directly or indirectly resemble the operations of data processing devices coupled to networks. These process descriptions and representations are typically used by those skilled in the art to most effectively convey the substance of their work to others skilled in the art. Numerous specific details are set forth in order to provide a thorough understanding of the present invention. However, it is understood to those skilled in the art that certain embodiments of the present invention may be practiced without certain, specific details. In other instances, well known methods, procedures, components, and circuitry have not been described in detail to avoid unnecessarily obscuring aspects of the embodiments.

[0036] Reference herein to "embodiment" means that a particular feature, structure, or characteristic described in connection with the embodiment can be included in at least one embodiment of the invention. The appearances of this phrase in various places in the specification are not necessarily all referring to the same embodiment, nor are separate or alternative embodiments mutually exclusive of other embodiments. The embodiments described herein, explicitly and implicitly understood by one skilled in the art, may be combined with other embodiments.

II. Example Environment

[0037] Referring now to the drawings, in which like numerals may refer to like parts throughout the several views. FIG. 1 shows an exemplary configuration **100** in which certain embodiments may be practiced. The configuration **100** may represent, but not be limited to, a part of a residential home, a business building, or a complex with multiple zones. There are a number of multimedia players of which three examples **102**, **104** and **106** are shown as audio devices. Each of the audio devices may be installed or provided in one particular area or zone and hence referred to as a zone player herein. It is understood that a zone can comprise more than one zone player.

[0038] As used herein, unless explicitly stated otherwise, an audio source or audio sources are generally in digital format and can be transported or streamed over a data network. To facilitate the understanding of the example environment of FIG. 1, it is assumed that the configuration **100** represents a home. Though, it is understood that this technology is not limited to its place of application. Referring back to FIG. 1, the zone players **102** and **104** may be located in one or two of the bedrooms while the zone player **106** may be installed or positioned in a living room. All of the zone players **102**, **104,** and **106** are coupled directly or indirectly to a data network **108**. In addition, a computing device **110** is shown to be coupled on the network **108**. In reality, any other device such as a home gateway device, a storage device, or an MP3 player may be coupled to the network **108** as well.

[0039] The network **108** may be a wired network, a wireless network or a combination of both. In one example, all devices including the zone players **102**, **104,** and **106** are coupled to the network **108** by wireless means based on an industry standard such as IEEE 802.11. In yet another example, all devices including the zone players **102**, **104,** and **106** are part of a local area network that communicates with a wide area network (e.g., the Internet). In still another example, all devices including the zone players **102**, **104** and **106** and a controller **142** forms an ad-hoc network and may be specifically named, e.g., a household identifier: Smith Family, to be differentiated from a similar neighboring setup with a household identifier, e.g., Kallai Family.

[0040] Many devices on the network **108** are configured to download and store audio sources. For example, the computing device **110** can download audio sources, such as music or audio associated with videos, from the Internet (e.g., the "cloud") or some other source and store the downloaded audio sources locally for sharing with other devices on the Internet or the network **108**. The computing device **110** or any of the zone players **102**, **104**, and **106** can also be configured to receive streaming audio. Shown as a stereo system, the device **112** is configured to receive an analog audio source (e.g., from broadcasting) or retrieve a digital audio source (e.g., from a compact disk). The analog audio sources can be converted to digital audio sources. In

accordance with certain embodiments, the various audio sources may be shared among the devices on the network **108**.

[0041] Two or more zone players (e.g., any two or more of the zone players 102, 104, and 106) may be grouped together to form a new zone group. Any combinations of zone players and an existing zone group may be grouped together. In one instance, a new zone group is formed by adding one zone player to another zone player or an existing zone group.

[0042] In certain embodiments, there are two or more zone players in one environment (e.g., a living room in a house). Instead of grouping these two zone players to play back the same audio source in synchrony, these two zone players may be configured to play two separate sounds in left and right channels. In other words, the stereo effects of a sound are reproduced or enhanced through these two zone players, one for the left sound and the other for the right sound. Likewise, for a 3-channel (or 2.1 sound effects) sound, three such zone players may be reconfigured as if there are three speakers: left and right speakers and a subwoofer to form a stereo sound. The details of the reconfiguring the zone players and operating these audio products are described more below. Similar configurations with multiple channels (greater than 3, such as 4, 5, 6, 7, 9 channels and so on) also apply. For example, configurations that use more than two channels may be useful in television and theater type settings, where video content such as in the form of television and movies is played together with audio content that contains more than two channels. Further, certain music might similarly be encoded with more than two channel sound.

[0043] In certain embodiments, two or more zone players may be consolidated to form a single, consolidated zone player. The consolidated zone player may further be paired with a single zone player or yet another consolidated zone player. A consolidated zone player may comprise one or more individual playback devices. Each playback device of a consolidated playback device is preferably set in a consolidated mode.

[0044] According to certain embodiments, one can continue to do any of: group, consolidate, and pair until a desired configuration is complete. The actions of grouping, consolidation, and pairing are preferably performed through a control interface and not by physically connecting and re-connecting speaker wire, for example, to individual, discrete speakers to create different configurations. As such, certain embodiments described herein provide a more flexible and dynamic platform through which sound reproduction can be offered to the end-user.

[0045] According to certain embodiments, a particular zone player (e.g., any of zone players **102**, **104,** and **106**) may be configured to receive a first audio data stream from a first source. The first source might obtain the first audio data stream from any of a downloaded song(s) (e.g., a music file stored on an accessible hard-drive), Internet radio station, online music service, online movie service, and the like, in addition to the more traditional means of accessing audio and video content. The zone player may be further capable to receive and play a second audio data stream from a second source. The second source may be coupled to an audio device through a line-in connector on the second source. In certain embodiments, an audio device might include any of an audio signal source device, such as a record player, radio, cassette player, CD player, DVD player, etc. In certain embodiments, an audio source may include a wireless networking device, such as an AirPort Express, which is an audio device that is commercially offered for sale by Apple, Inc. The AirPort Express may provide streaming audio data to the line-in connection of the second source. Audio data from the AirPort Express device may be controlled via a graphical interface, such as an iTunes music player, which may be separate from a controller of the playback device or the second source. It is understood that the first and second sources may include zone players (e.g., any of zone players **102**, **104,** and **106).**

[0046] A listener may command the audio device to play audio (e.g., without having to manually switch sources on the zone player). For example, if the audio device is an AirPort Express, a listener may use an AirPort-enabled computer or smart phone with an iTunes music player, for example, to command the audio device to play. The second source is configured, such

that when a signal is detected on the line-in connector, the second source automatically switches the zone player to play audio from the audio device via the second audio data stream. The switch to play audio from the audio device may optionally be performed only after the second source detects a signal on the line-in connector for a threshold time. An example threshold time is 300 milliseconds or less, though any programmed time can work. The play back of the second audio data stream may override the play back of the first audio data stream. The zone player and any of the first source and second source may be components of a single apparatus, or the playback device may be separate from any of the first source and second source and communicate with one another, such as over a network.

[0047] At some later point in time, with the audio device connected to the second source via its line-in connector still playing, the listener may decide to play a new audio data stream from a different source and responsively input a command that is communicated to the zone player to play the new audio data stream. The zone player receives the command and switches to the listener's desired source and the new audio data stream is played. The zone player subsequently instructs the second source having the line-in connector to stop sending its audio data stream to the zone player. At this point, the second source waits until it no longer detects a signal on its line-in connector for an interval of time. An example interval of time is 13 seconds or less, though any programmed time can work. The second source is now armed (or rearmed) and once again ready to automatically switch the playback on the zone player to the audio data stream from the second source, should the second source once again detect a signal on its line-in connector from the audio device.

[0048] An advantage of certain embodiments described above is that the listener can control the audio device itself (e.g., such as by pressing "play" or "stop" on the audio device itself or by pressing "play" or "stop" on a graphical interface associated with the audio device) and let the system detect a line-in signal and automatically switch the source of the zone player, without requiring the listener from having to manually switch the zone player source.

[0049] Another advantage of certain embodiments described above is that the system may allow the listener to switch the playback device to a different source even while the line-in signal is still present.

[0050] Yet another advantage of certain embodiments described above is that the system is capable of rearming itself such that the system can switch the source back to the audio device, should the system once again detect the line-in signal.

[0051] According to some embodiments, a particular zone player (e.g., any of zone players **102**, **104,** and **106**) is configured to output audio data according to a first volume level. When the zone player is automatically switched to play an audio data stream from a new source having a line-in connector, the volume of the zone player is modified to a second volume level. The second volume level is set such that increased dynamic range is given to a volume control of the line-in connected source. An example second volume level is 75 percent of total volume. When the zone player switches once again to play an audio stream from a source that is different from the new source having the line-in connector, the volume of the zone player is returned to a safe volume level such that that audio is not played back to the listener at a high level. An example safe volume level is 25 percent of total volume.

[0052] It is understood that the technology described herein is not limited to its place of application. For example, it is understood that zones and zone players, and the embodiments described herein, may also be used in vehicles, on water craft, airplanes, amphitheaters, outdoors, along the streets in a village or city, and so on, in addition to homes, offices, gyms, schools, hospitals, hotels, movie theaters, malls, stores, casinos, museum, entertainment parks, or any other place where audio content is played. As such, it will be appreciated that the embodiments described herein may be used in connection with any system or application for which a certain audio system configuration is desired.

III. Example Playback Devices

[0053] Referring now to FIG. 2A, there is shown an exemplary functional block diagram of a zone player **200** in accordance with an embodiment. The zone player **200** includes a network interface **202**, line-in connection **220**, processor **204**, memory **206**, audio processing circuit **210**, module **212**, optionally, audio amplifier **214** that may be internal or external, and optionally, speaker unit **218** connected to the audio amplifier **214**. The network interface **202** facilitates a data flow between a data network (i.e., the data network **108** of FIG. 1) and the zone player **200** and typically executes a special set of rules (i.e., a protocol) to send data back and forth. One of the common protocols used in the Internet is TCP/IP (Transmission Control Protocol/Internet Protocol). In general, a network interface **202** manages the assembling of an audio source or file into smaller packets that are to be transmitted over the data network or reassembles received packets into the original source or file. In addition, the network interface **202** handles the address part of each packet so that it gets to the right destination or intercepts packets destined for the zone player **200**. Accordingly, in certain embodiments, each of the packets includes an IP-based source address as well as an IP-based destination address.

[0054] The network interface **202** may include one or both of a wireless interface **216** and a wired interface **217**. The wireless interface **216**, also referred to as an RF interface, provides network interface functions by a wireless means for the zone player **200** to communicate with other devices in accordance with a communication protocol (such as the wireless standard IEEE 802.11a, 802.11b, 802.11g, 802.11n, or 802.15.1). The wired interface **217** provides network interface functions by a wired means (e.g., an Ethernet cable). In one embodiment, a zone player includes both of the interfaces **216** and **217**, and other zone players include only a RF or wired interface. Thus these other zone players communicate with other devices on a network or retrieve audio sources via the zone player. The processor **204** is configured to control the operation of other parts in the zone player **200**. The memory **206** may be loaded with one or more software modules that can be executed by the processor **204** to achieve desired tasks. According to one

embodiment, a software module implementing an embodiment, such as described herein, is executed, the processor **204** operates in accordance with the software module in reference to a saved zone group configuration characterizing a zone group created by a user, the zone player **200** is caused to retrieve an audio source from another zone player or a device on the network and synchronize the players in the zone group to play back the audio source as desired. According to another embodiment, a software module implementing an embodiment described herein creates a pair between two or more zone players to create a desired multi-channel audio environment.

[0055] According to another embodiment, a software module implementing one or more embodiments described herein allows for automated source switching. For example, processor **204** operates in accordance with a software module for determining that an audio signal is present at the line-in connector **220** and responsively switches a source of a zone player or playback device to the audio device. Processor **204**, in accordance with a software module, may further receive an instruction to stop the play back of audio data from the audio device even when the audio signal is present at the line-in connector **220**. Processor **204**, in accordance with a software module, may further determine that the audio signal is no longer present at the line-in connector **220** and responsively rearm, such that a subsequent presence of the audio signal will switch the source to the audio device.

[0056] Line-in connection **220** may include a socket for a jack plug or some other audio connector and may be coupled to the audio processing circuit **210**. In certain embodiments, the line-in connection **220** includes a socket for any of a 0.25 inch plug, a 3.5 mm plug, and a 2.5 mm plug. An illustrative setup may include connecting an AirPort Express via its 3.5 mm stereo mini-jack connection to the zone player **200** via its 3.5 mm connection (e.g., line-in connection **220**).

[0057] According to one embodiment, the memory **206** is used to save one or more saved zone configuration files that may be retrieved for modification at any time. Typically, a saved zone group configuration file is transmitted to a controller (e.g., the controlling device **140** or **142** of FIG. 1, a computer, a portable device, or a TV) when a user operates the controlling device. The zone group configuration provides an interactive user interface so that various manipulations or control of the zone players may be performed.

[0058] In certain embodiments, the audio processing circuit **210** resembles the circuitry in an audio playback device and includes one or more analog-to-digital converters (ADC), one or more digital-to-analog converters (DAC), an audio preprocessing part, an audio enhancement part or a digital signal processor and others. In operation, when an audio source is retrieved via the network interface **202**, the audio source is processed in the audio processing circuit **210** to produce analog audio signals. The processed analog audio signals are then provided to the audio amplifier **214** for playback on speakers. In addition, the audio processing circuit **210** may include necessary circuitry to process analog signals as inputs to produce digital signals for sharing with other devices on a network.

[0059] Depending on an exact implementation, the module **212** may be implemented as a combination of hardware and software. In one embodiment, the module **212** is used to save a scene. The audio amplifier **214** is typically an analog circuit that powers the provided analog audio signals to drive one or more speakers.

[0060] It is understood that zone player **200** is an example of a playback device. Examples of playback devices include those zone players that are commercially offered for sale by Sonos, Inc. of Santa Barbara, California. They currently include a ZonePlayer 90, ZonePlayer 120, and Sonos S5. The ZonePlayer 90 is an example zone player without a built-in amplifier, whereas the ZonePlayer 120 is an example zone player with a built-in amplifier. The S5 is an example zone player with a built-in amplifier and speakers. In particular, the S5 is a five-driver speaker system

that includes two tweeters, two mid-range drivers, and one subwoofer. When playing audio content via the S5, the left audio data of a track is sent out of the left tweeter and left mid-range driver, the right audio data of a track is sent out of the right tweeter and the right mid-range driver, and mono bass is sent out of the subwoofer. Further, both mid-range drivers and both tweeters have the same equalization (or substantially the same equalization). That is, they are both sent the same frequencies, just from different channels of audio. While the S5 is an example of a zone player with speakers, it is understood that a zone player with speakers is not limited to one with a certain number of speakers (e.g., five speakers as in the S5), but rather can contain one or more speakers. Further, a zone player may be part of another device, which might even serve a primary purpose different than audio.

IV. Example Controller

[0061] Referring now to FIG. 2B, there is shown an exemplary controller **240**, which may correspond to the controlling device **140** or **142** of FIG. 1. The controller **240** may be used to facilitate the control of multi-media applications, automation and others in a complex. In particular, the controller **240** is configured to facilitate a selection of a plurality of audio sources available on the network, controlling operations of one or more zone players (e.g., the zone player **200**) through a RF interface corresponding to the wireless interface **216** of FIG. 2A. According to one embodiment, the wireless means is based on an industry standard (e.g., infrared, radio, wireless standard IEEE 802.11a, 802.11b 802.11g, 802.11n, or 802.15.1). When a particular audio source is being played in the zone player **200**, a picture, if there is any, associated with the audio source may be transmitted from the zone player **200** to the controller **240** for display. In one embodiment, the controller **240** is used to synchronize audio playback of more than one zone player by grouping the zone players in a group. In another embodiment, the controller **240** is used to control the volume of each of the zone players in a zone group individually or together.

[0062] In an embodiment, the controller **240** is used to create a pairing between two or more playback devices to create or enhance a multi-channel listening environment. For example, the controller **240** may be used to select and pair two or more playback devices. In addition, the controller **240** may be used to turn pairing on or off. The controller **240** may also be used to consolidate playback devices, and further to set a particular playback device in consolidated mode. Accordingly, in some embodiments, the controller **240** provides a flexible mechanism for dynamically configuring a multi-channel audio environment. In some instances, the pairing creates a multi-channel listening environment. In some instances, the pairing enhances a multi-channel listening environment by increasing the separation between devices. For example, two individual playback devices, which are positioned at a distance from each other, may provide more channel separation to the listener than the audio coming from only a single device.

[0063] The user interface for the controller **240** includes a screen **242** (e.g., a LCD screen) and a set of functional buttons as follows: a "zones" button **244**, a "back" button **246**, a "music" button **248**, a scroll wheel **250**, "ok" button **252**, a set of transport control buttons **254**, a mute button **262**, a volume up/down button **264**, a set of soft buttons **266** corresponding to the labels **268** displayed on the screen **242**.

[0064] The screen **242** displays various screen menus in response to a user's selection. In one embodiment, the "zones" button **244** activates a zone management screen or "Zone Menu", which is described in more details below. The "back" button **246** may lead to different actions depending on the current screen. In one embodiment, the "back" button triggers the current screen display to go back to a previous one. In another embodiment, the 'back" button negates the user's erroneous selection. The "music" button **248** activates a music menu, which allows the selection of an audio source (e.g., a song) to be added to a zone player's music queue for playback.

LINKPLAY EXHIBIT 1002
Page 1263 of 1292

[0065] The scroll wheel **250** is used for selecting an item within a list, whenever a list is presented on the screen **242**. When the items in the list are too many to be accommodated in one screen display, a scroll indicator such as a scroll bar or a scroll arrow is displayed beside the list. When the scroll indicator is displayed, a user may rotate the scroll wheel **250** to either choose a displayed item or display a hidden item in the list. The "OK" button **252** is used to confirm the user selection on the screen **242**.

[0066] There are three transport buttons **254,** which are used to control the effect of the currently playing song. For example, the functions of the transport buttons may include play/pause and forward/rewind a song, move forward to a next song track, or move backward to a previous track. According to one embodiment, pressing one of the volume control buttons such as the mute button **262** or the volume up/down button **264** activates a volume panel. In addition, there are three soft buttons **266** that can be activated in accordance with the labels **268** on the screen **242**. It is understood that, in a multi-zone system, there may be multiple audio sources being played respectively in more than one zone players. The music transport functions described herein shall apply selectively to one of the sources when a corresponding one of the zone players or zone groups is selected.

[0067] FIG. 2C shows an exemplary controller **260** which may correspond to the controlling device **140** or **142** of FIG. 1. The controller **260** is provided with a touch screen that allows a user to interact with the controller, for example, to navigate a playlist of many items, to control operations of one or more players. In one embodiment as it will be further shown in FIGS. 10A to 10F, a user may interact with the controller to make a multi-channel audio environment, such as create a stereo pair for example, and may even be used to separate the multi-channel audio environment, such as disengage a stereo pair. It should be noted that other network-enabled portable devices such as an iPhone, iPad or any other smart phone or network-enabled device may be used as a controller to interact or control multiple zone players in an environment (e.g., a networked computer such as a PC or Mac may also be used as a controller). According to one

embodiment, an application may be downloaded into a network enabled device. Such an application may implement most of the functions discussed above for the controller **240** using a navigating mechanism or touch screen in the device. Those skilled in the art will appreciate the flexibility of such an application and its ability to be ported to a new type of portable device given the detailed description herein.

[0068] FIG. 2D illustrates an internal functional block diagram of an exemplary controller **270**, which may correspond to the controller **240** of FIG. 2B, a computing device, smart phone, or any other communicative device. The screen **272** on the controller **270** may be an LCD screen. The screen **272** communicates with and is commanded by a screen driver **274** that is controlled by a microcontroller (e.g., a processor) **276**. The memory **282** may be loaded with one or more application modules **284** that can be executed by the microcontroller **276** with or without a user input via the user interface **278** to achieve desired tasks. In one embodiment, an application module is configured to facilitate grouping a number of selected zone players into a zone group and synchronizing the zone players for one audio source. In another embodiment, an application module is configured to control together the audio sounds (e.g., volume) of the zone players in a zone group. In operation, when the microcontroller **276** executes one or more of the application modules **284**, the screen driver **274** generates control signals to drive the screen **272** to display an application specific user interface accordingly, more of which will be described below.

[0069] The controller **270** includes a network interface **280** referred to as a RF interface **280** that facilitates wireless communication with a zone player via a corresponding RF interface thereof. In one embodiment, the commands such as volume control and audio playback synchronization are sent via the RF interfaces. In another embodiment, a saved zone group configuration is transmitted between a zone player and a controller via the RF interfaces. The controller **270** may control one or more zone players, such as **102**, **104** and **106** of FIG. 1. Nevertheless, there may be more than one controller, each preferably in a zone (e.g., a room or rooms nearby each other) and configured to control any one and all of the zone players.

[0070] In one embodiment, a user creates a zone group including at least two zone players from the controller **240** that sends signals or data to one of the zone players. As all the zone players are coupled on a network, the received signals in one zone player can cause other zone players in the group to be synchronized so that all the zone players in the group play back an identical audio source or a list of identical audio sources in a timely synchronized manner such that no (or substantially no) audible delays or hiccups could be heard. Similarly, when a user increases the audio volume of the group from the controller, the signals or data of increasing the audio volume for the group are sent to one of the zone players and causes other zone players in the group to be increased together in volume and in scale.

[0071] According to one implementation, an application module is loaded in memory **282** for zone group management. When a predetermined key (e.g. the "zones" button **244**) is activated on the controller **240**, the application module is executed in the microcontroller **276**. The input interface **278** coupled to and controlled by the microcontroller **276** receives inputs from a user. A "Zone Menu" is then displayed on the screen **272**. The user may start grouping zone players into a zone group by activating a "Link Zones" or "Add Zone" soft button, or de-grouping a zone group by activating an "Unlink Zones" or "Drop Zone" button. The detail of the zone group manipulation will be further discussed below.

[0072] As described above, the input interface **278** includes a number of function buttons as well as a screen graphical user interface. It should be pointed out that the controller **240** in FIG. 2B is not the only controlling device that may practice the embodiments. Other devices that provide the equivalent control functions (e.g., a computing device, a hand-held device) may also be configured to practice the present invention. In the above description, unless otherwise specifically described, it is clear that keys or buttons are generally referred to as either the physical buttons or soft buttons, enabling a user to enter a command or data.

[0073] One mechanism for 'joining' zone players together for music playback is to link a number of zone players together to form a group. To link a number of zone players together, a user may manually link each zone player or room one after the other. For example, there is a multi-zone system that includes the following zones:

Bathroom

Bedroom

Den

Dining Room

Family Room

Foyer

[0074] If a user wishes to link five of the six zone players using the current mechanism, the user may start with a single zone and then manually link each zone to that zone. This mechanism may be sometimes quite time consuming. According to one embodiment, a set of zones can be dynamically linked together using one command. Using what is referred to herein as a theme or a zone scene, zones can be configured in a particular scene (e.g., morning, afternoon, or garden), where a predefined zone grouping and setting of attributes for the grouping are automatically effectuated.

[0075] For instance, a "Morning" zone scene/configuration command would link the Bedroom, Den and Dining Room together in one action. Without this single command, the user would need to manually and individually link each zone. FIG. 3A provides an illustration of one zone scene, where the left column shows the starting zone grouping – all zones are separate, the column on the right shows the effects of grouping the zones to make a group of 3 zones named after "Morning".

[0076] Expanding this idea further, a Zone Scene can be set to create multiple sets of linked zones. For example, a scene creates 3 separate groups of zones, the downstairs zones would be

linked together, the upstairs zones would be linked together in their own group, and the outside zones (in this case the patio) would move into a group of its own.

[0077] In one embodiment as shown in FIG. 3B, a user defines multiple groups to be gathered at the same time. For example: an "Evening Scene" is desired to link the following zones:

- Group1
  - Bedroom
  - Den
  - Dining Room
- Group 2
  - Garage
  - Garden

where Bathroom, Family Room and Foyer should be separated from any group if they were part of a group before the Zone Scene was invoked.

[0078] A feature of certain embodiments is that that zones do not need to be separated before a zone scene is invoked. In one embodiment, a command is provided and links all zones in one step, if invoked. The command is in a form of a zone scene. After linking the appropriate zones, a zone scene command could apply the following attributes:

Set volumes levels in each zones (each zone can have a different volume)

Mute/Unmute zones.

Select and play specific music in the zones.

Set the play mode of the music (Shuffle, Repeat, Shuffle-repeat)

Set the music playback equalization of each zone (e.g., bass treble).

[0079] A further extension of this embodiment is to trigger a zone scene command as an alarm clock function. For instance the zone scene is set to apply at 8:00am. It could link appropriate zones automatically, set specific music to play and then stop the music after a defined duration. Although a single zone may be assigned to an alarm, a scene set as an alarm clock provides a synchronized alarm, allowing any zones linked in the scene to play a predefined audio (e.g., a favorable song, a predefined playlist) at a specific time or for a specific duration. If, for any reason, the scheduled music failed to be played (e.g., an empty playlist, no connection to a share, failed UPnP, no Internet connection for an Internet Radio station), a backup buzzer will sound. This buzzer will be a sound file that is stored in a zone player.

[0080] FIG. 4 shows an exemplary user interface **400** that may be displayed on a controller **142** or a computer **110** of FIG. 1. The interface **400** shows a list of items that may be set up by a user to cause a scene to function at a specific time. In the embodiment shown in FIG. 4, the list of items includes "Alarm", "Time", "Zone", "Music", "Frequency" and "Alarm length". "Alarm" can be set on or off. When "Alarm" is set on, "Time" is a specific time to set off the alarm. "Zone" shows which zone players are being set to play a specified audio at the specific time. "Music" shows what to be played when the specific time arrives. "Frequency" allows the user to define a frequency of the alarm. "Alarm length" defines how long the audio is to be played. It should be noted that the user interface **400** is provided herein to show some of the functions associated with setting up an alarm. Depending on an exact implementation, other functions, such as time zone, daylight savings, time synchronization, and time/date format for display may also be provided.

[0081] According to one embodiment, each zone player in a scene may be set up for different alarms. For example, a "Morning" scene includes three zone players, each in a bedroom, a den, and a dining room. After selecting the scene, the user may set up an alarm for the scene as whole. As a result, each of the zone players will be activated at a specific time.

[0082] FIG. 5A shows a user interface **500** to allow a user to form a scene. The panel on the left shows the available zones in a household. The panel on the right shows the zones that have been selected and be grouped as part of this scene. Depending on an exact implementation of a user interface, Add/Remove buttons may be provided to move zones between the panels, or zones may be dragged along between panels.

[0083] FIG. 5B shows another user interface **520** to allow a user to form a scene. The user interface **520** that may be displayed on a controller or a computing device, lists available zones in a system. A checkbox is provided next to each of the zones so that a user may check in the zones to be associated with the scene.

[0084] FIG. 5C shows a user interface **510** to allow a user to adjust a volume level of the zone players in a zone scene individually or collectively. As shown in the user interface **510**, the 'Volumes…' button (shown as sliders, other forms are possible) allows the user to affect the volumes of the associated zone players when a zone scene is invoked. In one embodiment, the zone players can be set to retain whatever volume that they currently have when the scene is invoked. Additionally the user can decide if the volumes should be unmuted or muted when the scene is invoked.

V. Providing Example Player Themes or Zone Scenes

[0085] FIG. 6 shows a flowchart or process **600** of providing a player theme or a zone scene for a plurality of players, where one or more of the players are placed in a zone. The process **600** is presented in accordance with one embodiment of the present invention and may be implemented in a module to be located in the memory **282** of FIG. 2C.

[0086] The process **600** is initiated when a user decides to proceed with a zone scene at **602**. The process **600** then moves to **604** where it allows a user to decide which zone players to be associated with the scene. For example, there are ten players in a household, and the scene is

named after "Morning". The user may be given an interface to select four of the ten players to be associated with the scene. At **606**, the scene is saved. The scene may be saved in any one of the members in the scene. In the example of FIG. 1, the scene is saved in one of the zone players and displayed on the controller **142**. In operation, a set of data pertaining to the scene includes a plurality of parameters. In one embodiment, the parameters include, but may not be limited to, 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 user may go back to **602** to configure another scene if desired.

[0087] Given a saved scene, a user may activate the scene at any time or set up a timer to activate the scene at **610**. The process **600** can continue when a saved scene is activated at **610**. At **612**, upon the activation of a saved scene, the process **600** checks the status of the players associated with the scene. The status of the players means that each of the players shall be in condition to react in a synchronized manner. In one embodiment, the interconnections of the players are checked to make sure that the players communicate among themselves and/or with a controller if there is such a controller in the scene.

[0088] It is assumed that all players associated with the scene are in good condition. At **614**, commands are executed with the parameters (e.g., pertaining to a playlist and volumes). In one embodiment, data including the parameters is transported from a member (e.g., a controller) to other members in the scene so that the players are caused to synchronize an operation configured in the scene. The operation may cause all players to play back a song in identical or different volumes or to play back a pre-stored file.

VI. Example Multi-channel Environments

[0089] FIG. 7 shows an example configuration in which an audio source is played back on two players **702** and **704**, according to an example embodiment. These two players **702** and **704** may be located in and around one place (e.g., a hall, room, or nearby rooms) and are designated

to play two sound tracks respectively. For example, an audio source may have left and right sound channels or tracks (e.g., stereo sound). Instead of grouping the players **702** and **704** to play back the audio source together in synchrony, where each player **702** and **704** plays the same audio content at substantially the same time, the players **702** and **704** can be paired to play different channels of the audio source in synchrony. As a result of pairing, the stereo sound effects can be simulated or enhanced via two players **702** and **704** versus one player or none of the players, for example.

[0090] In certain embodiments, each player of players **702** and **704** includes a network interface, one or more speaker drivers (two or more speaker drivers in some instances, such as when the player can play in stereo mode absent pairing), an amplifier, and a processor, such as shown in FIG. 2A. The network interface receives audio data over a network. One or more amplifiers power the speaker drivers. The processor processes the audio data to be output through the speaker drivers. The processor may further configure a first equalization of the output from the speaker drivers in accordance with a first type of pairing and configuring a second equalization of the output from the speaker drivers in accordance with a second type of pairing.

[0091] In an embodiment, the two players **702** and **704** are configured to output a plurality of audio channels independent of each other. For example, each player **702** and **704** may be configured to output audio content in stereo independently from each other. Subsequent to pairing, one playback device (e.g., player **702**) is configured to output a first subset of the plurality of audio channels and the other playback device (e.g., player **704**) is configured to output a second subset of the plurality of audio channels. The first and second subsets are different. In this example, subsequent to pairing players **702** and **704**, player **702** might play the right channel and player **704** might play the left channel. In another example, player **702** might play the right channel plus a center channel (e.g., in television or theater mode) and player **704** might play the left channel plus the center channel. Even in the latter example, the first and

second subsets are different in that player **702** is playing channels Right + Center and player **704** is playing channels Left + Center. In yet another embodiment, subsequent to pairing, player **702** might play all channels except certain bass frequencies, which may be played via player **704**, thereby using player **704** as a subwoofer.

[0092] In another embodiment, a collection of three or more playback devices (e.g., players **702**, **704**, and one or more additional players) are each configured to output a plurality of audio channels independent of another playback device in the collection. Subsequent to pairing, each of the playback devices is configured to output a generally different audio channel(s) from the collection. This embodiment is particularly useful in a television or movie theater setting where a particular playback device of the multiple playback devices is configured to output in two-channel or stereo mode at one time (e.g., when playing a song), and subsequent to pairing, is configured to output as a front-right channel, a front-center channel, a front-left channel, a rear-right channel, a rear-left channel, and so on (e.g., when watching a movie or television).

[0093] In another embodiment, one of the paired playback devices (e.g., player **702** or player **704**) processes the data of the audio item, essentially separating the data into channels, each of the channels representing a single-sound track, for example, and being played back in one of the playback devices, thus creating or enhancing a multi-channel listening environment. In an alternative embodiment, both playback devices (e.g., players **702** and **704**) may receive and process the data of the audio item and each playback device may output only the audio content designated for the respective player. For example, player **702** might receive both left and right channel audio, but only play the left channel, whereas player **704** might also receive both left and right channel audio, but only play the right channel.

[0094] In another embodiment, two or more playback devices (e.g., players **702** or **704**) may be grouped into a single or consolidated playback device and the consolidated playback device (e.g., consolidated player **702** + **704**) may be paired with one or more playback devices. For

instance, two playback devices maybe grouped into a first consolidated playback device and two additional playback devices maybe grouped into a second consolidated playback device. Then, the first and second consolidated playback devices may be paired to create or enhance a multi-channel listening environment.

[0095] In certain embodiments, a playback device (e.g., either player **702** or **704**) that is configured to output an audio channel is paired with one or more additional playback devices, such that the playback device is configured to output a different audio channel than previously configured. For instance, the playback device might be configured to output a right channel in stereo mode, but subsequent to being paired with one or more additional playback devices, might be configured to output a rear, right channel in theater mode. The playback device may be paired to one or more other playback devices.

[0096] In certain embodiments, a playback device (e.g., either player **702** or **704**) that is configured to output a plurality of audio channels is paired with one or more additional playback devices, such that the playback device is configured to output a subset of the plurality of audio channels relative to the one or more additional playback devices. For instance, the playback device might be configured to output in two-channel or stereo mode, but subsequent to being paired with one or more playback devices might be configured to output a right or left channel. The playback device may be paired to one or more other playback devices.

[0097] According to certain embodiments, the action of pairing two or more playback devices is triggered based on a command from a user via a control interface (e.g., a manual command) or responsive to an event (e.g., an automatic command). For example, using a controller, a user can create a pairing between two or more playback devices or disengage the pairing between two or more playback devices. In another example, pairing may be triggered by the audio content itself, a signal received from a source device, or some other predefined event, such that pairing occurs when the event is detected by the controller or playback device, for

example. In addition, another device might be programmed to detect the event and provide a pairing signal to the controller and/or playback devices.

[0098] Further, it is understood that going from a configuration of no pairing (unpaired or non paired) to a configuration of pairing or from one kind of pairing (e.g., a pairing used in a type of stereo mode or theater mode) to a different kind of pairing (e.g., another pairing used in a type of stereo mode or theater mode) are all various types of "pairing" that can occur according to certain embodiments. In addition, disengaging a pairing between multiple playback devices might go from pairing to no pairing or from pairing of a first kind back to pairing of a previous kind, for example.

[0099] In one example, a first type of pairing might include "no pairing" with another playback device and a second type of pairing might include pairing with one or more additional playback devices. In a second example, a first type of pairing might include pairing with a second playback device and a second type of pairing might include pairing with a plurality of playback devices. In a third example, a first type of pairing might include reproducing two channel sound via the speaker drivers and a second type of pairing comprises reproducing no more than one channel of the two channel sound via the speaker drivers. In a fourth example, a first type of pairing might comprise reproducing a first audio channel via the speaker drivers and the second type of pairing might include reproducing a second audio channel via the speaker drivers. In a fifth example, a first type of pairing might include reproducing the audio content via the speaker drivers in stereo mode and a second type of pairing might include reproducing the audio content via the speaker drivers in theater mode. In a sixth example, a first type of pairing might include reproducing the audio content via the speaker drivers and a second type of pairing comprises reproducing the audio content via the speaker drivers when in consolidated mode. It is understood that various variations and modifications may be made to the examples described just above with the attainment of some or all of the advantages of the technology described herein.

[00100] According to certain embodiments, the configuration of a playback device may include any of: changing the equalization of the playback device by changing the equalization of one or more specific speaker drivers and optimizing the synchronization between paired devices. Changing the equalization of the playback device might include any of: turning on or off (or effectively muting) one or more specific speaker drivers, changing the channel output of one or more speaker drivers, changing the frequency response of one or more specific speaker drivers, changing the amplifier gain of any particular speaker driver, changing the amplifier gain of the playback device as a whole.

[00101] In certain embodiments, changing the equalization of a playback device (e.g., changing the equalization of one or more speaker drivers of the playback device) may affect frequency dependent parameters. Examples might include the adjustment of the strength of frequencies within the audio data, a phase adjustment, and time-delay adjustment. In addition, a particular equalization may use a first type of pass filter, such as one that attenuates high, middle, or low frequencies, for example, while allowing other frequencies to pass unfiltered (or substantially unfiltered). Filters might also be different kinds or of a different order (e.g., first order filter, second order filter, third order filter, fourth order filter, and so on). For example, a first equalization of a playback device might include using a first type of pass filter to modify the output based on a first type of pairing and a second equalization of the playback device might include using a second type of pass filter to modify the output based on the second type of pairing. In this example, the first and second type of pass filters have one or different properties and/or behaviors, thus changing the equalization and sonic behavior of the device.

[00102] By way of illustration, when two S5 devices are paired to create a stereo pair, for example, one S5 device may be configured as the "left" and the other S5 device may be configured as the "right." In one embodiment, the user may determine which is left or right. In this configuration, for example, the left and right audio data may be sent to both S5 devices, but the left audio data of the track is played out of the S5 device configured as left and the right

audio data of a track is played out of the S5 device configured as right. In addition, the equalization of each S5 device is changed in an attempt to reduce or eliminate certain constructive or destructive interference. For example, one tweeter on each S5 device may be turned off or substantially muted. In certain embodiments, the crossover frequency to each driver may even be changed from a previous configuration so that two or more drivers are not necessarily outputting the exact same audio data, otherwise constructive and/or destructive interference may occur. In certain embodiments, the amplifier gain is adjusted for a particular speaker driver and/or for the playback device as a whole.

[00103] In operation, according to certain embodiments, a controller **706** (e.g., a controller **142** of FIG. 1 or **240** of FIG. 2B or a portable device) is used to initiate the operation. Through a user interface, the controller **706** causes a player **702** to retrieve the audio source, provided the audio source is on a network **708 (e.g.**, the Internet or a local area network). Similarly, the controller **706** may also cause a designated device (e.g., another networked device) to establish a communication session with the player **702** to deliver the requested audio source. In any case, either one or both of the players **702** and **704** may have access to the data representing the audio source.

[00104] In certain embodiments, a module in the player **702** is activated to process the data. According to one embodiment, the right and left sound tracks are separated. One sound track is retained locally in one player and the other sound track is pushed or uploaded to the other device (e.g., via an ad-hoc network). When the right and left sound tracks are played back simultaneously or substantially simultaneously, the stereo sound effect can be appreciated.

[00105] In another embodiment, several tracks are separated, such as in television or theater mode. For example, the tracks may be separated into a center channel, right front channel, left front channel, right rear channel, left rear channel, and so on. Accordingly, one or more sound

tracks may be retained locally in one player and the other sound tracks are pushed or uploaded to the other devices.

[00106] In yet another embodiment, one player might process the data and retain one or more tracks locally, while the remaining data is sent onto another player. The receiving player may then process the data and retain one or more tracks locally and send any remaining data onto another player. This process, or one like it, may continue until all of the tracks are retained locally by corresponding player devices.

[00107] In yet another embodiment, each player might receive and process the data and play only the channel or channels that are designated for that player.

[00108] In certain embodiments, it is important to maintain good synchronization, especially when pairing two or more independently clocked playback devices so that the multi-channel audio content is played back as it was originally intended. According to an embodiment, a message may be initiated from one device to another that is also activated to send back an acknowledgement. Upon receiving the acknowledgement, the time delay in transporting data from one device to another can be measured. The time delay will be considered when synchronizing the two players to play back the two separated sound tracks. In certain embodiments, if sending a packet (e.g., a packet in accordance with SNTP protocol) to a playback device and receiving a response takes more than fifteen milliseconds, for example, the timing information contained within that packet, such as clock information, is discarded. If sending and receiving a packet is less than fifteen milliseconds, then the information from the packet is used to adjust playback, if so necessary.

[00109] Additional details of synchronizing operations of two or more independently clocked players are provided in commonly assigned US application No,: 10/816,217, filed Apr. 1, 2004, entitled "System and Method For Synchronizing Operations Among A Plurality Of

Independently Clocked Digital Data Processing Devices" which is hereby incorporated by reference.

[00110] FIG. 8 shows an example configuration of a pairing amongst multiple players **802**, **804**, **806**, **808**, **810**, and **812** in a theater-like environment, in accordance to an embodiment. Player **802** may operate as a front-left channel, player **804** may operate as a center channel, player **806** may operate as a front-right channel, player **808** may operate as a subwoofer, player **810** may operate as a rear, right channel, and player **812** may operate as a rear, right channel. In this example, the players **802**, **804**, **806**, **808**, **810**, and **812** are wirelessly coupled over network **816** so as to receive and transmit data over a wireless network, and obtain power from power outlets in the wall or through some other power source (e.g., a battery). Players **802**, **804**, **806**, **808**, **810**, and **812** may be wired, if so configured in an alternate embodiment. Controller **814** may be a network-enabled device, examples of which include a smart phone, tablet computer, laptop computer, desktop computer, or a television.

[00111] In one embodiment, a designated player, such as player **804,** receives multi-channel audio content from a source **816**. Source **816** might include audio and/or video content downloaded or streamed from the Internet, a DVD or Blu-Ray player, or from some other source of audio and/or video content. Player **804** separates the multi-channel audio and sends respective audio channels to its playback owner. For example, if a particular audio channel is designated for the front, right speaker, then that content is wirelessly directed from player **804** to player **802**, and so on. Players **802**, **804**, **806**, **808**, **810**, and **812** play the audio content synchronously, so as to create a multi-channel listening environment. Moreover, if source **816** provides video content along with audio content, then the audio content is preferably played in synchrony with the video content.

[00112] In another embodiment, each player of players **802**, **804**, **806**, **808**, **810**, and **812** may separate out its own one or more channels for playback. That is, either all audio content, or a

portion thereof, is sent to each player (e.g., from source **816** or another playback device) and the player itself obtains its own data for playback.

[00113] In addition, players **802**, **804**, **806**, **808**, **810**, and **812** may be reconfigured to operate in many different configurations, such as described above. For example, players **802** and **806** may be paired to operate in stereo mode, while the other players remain in sleep mode or turned off (player **808** may remain on in any particular configuration, if so desired and configured, because it is operating as a subwoofer). In another example, players **802** and **810** may be consolidated and output left channel audio, while players **806** and **812** may be consolidated and output right channel audio. In yet another example, some of players **802**, **804**, **806**, **808**, **810**, and **812** are consolidated into a single player and paired with additional playback devices, such as in an adjacent room. In a further example, players **802**, **804**, **806**, **808**, **810**, and **812** are grouped and not paired, when the audio content is music (versus movie content, for example). These are just some configuration examples. Many other configurations are possible using the teachings described herein.

[00114] FIG. 9 shows a flowchart or process **900** of grouping a plurality of audio products to play separated sound tracks in synchronization to simulate a multi-channel listening environment. The process **900** is presented in accordance with certain embodiments and may be implemented in a module to be located in the memory **282** of FIG. 2D. To facilitate the description of process **900**, a listening environment of stereo sound with left and right channels is described. Those skilled in the art can appreciate that the description can be equally applied to other forms of multi-channel listening environment (e.g., three, five, seven channel environments).

[00115] Typically, there is a plurality of players being controlled by one or more controllers, where these players are disposed in various locations. For example, there are five players in a house; three of them are respectively disposed in three rooms while two players are disposed in a

larger room. Accordingly, these two players would be candidates to be paired to simulate a stereo listening environment, instead of just playing synchronized audio from both in a grouped fashion. In another example, there are four players in a large space or adjacent spaces, two pairs of the players may be paired to simulate a stereo listening environment, in which two players in one consolidated pair can be grouped to play back one (left) sound track and the other two in the other consolidated pair can be grouped to play back one (right) sound track.

[00116] In any case, two groups of players or two players are decided to be paired at **902**. If no players are paired, the process **900** will not be activated. It is assumed that two players from a group of players being controlled by a controller are selected to be paired at **902**. The process **900** proceeds.

[00117] At **904**, a user may decide which player is to play back which sound track. Depending on the location of the user or listener(s) with respect to the selected players, it is assumed that a player or unit A is chosen to play back a left sound track and another player or unit B is chosen to play back a right sound track. In an alternative embodiment, the players themselves (or the controller) may automatically determine which unit is configured to play the right channel and which unit is configured to play the left channel without input from the user.

[00118] According to one embodiment, a time delay in transporting data between the two units A and B is measured at **906**. This time delay may facilitate sound synchronization between the two units as one of the units will receive a processed sound track from the other. The user may continue to operate on a controller to select a title (e.g., an audio source or an item from a playlist) for playback on the two units at **910**.

[00119] Once the title is determined at **912**, the data for the title is accessed. Depending on where the data is located, the controller may be configured to cause one of the two units to obtain or stream in the data. In one embodiment, the controller or unit A initiates a request to a remotely-networked device providing or storing the data. Assuming an authentication procedure,

if any, completes successfully, the remote device starts to upload the data to the unit A. Likewise, if the data is locally stored in the unit A, the data can be accessed locally without requesting the same from the network. As the data is being received or accessed in the unit A, a processing module is activated in the unit A to process the data, essentially separating the data into two streams of sound tracks at **914**. In an alternative embodiment, each unit may receive and process the data, essentially separating the data into a stream to be played by the respective unit.

[00120] At **916**, one of the streams is uploaded from the unit A to unit B via a local network (e.g., the ad-hoc network formed by all the players being controlled by the controller). As the streams are being distributed, the two units are configured to play back the streams respectively, each reproducing the sound of a single sound track at **918**. Together, in synchrony, the two units create a stereo sound listening environment.

[00121] It should be noted that the delay time, if noticeable, may be incorporated into the unit A to delay the consumption of the stream by the delay time to synchronize with the unit B. Alternatively, a non-selected player may be used to process a streaming data of the title and configured to supply two streams to the pair of players, thus equalizing the delay time that would be otherwise experienced by the unit B.

[00122] FIGS. 10A-10F show illustrative screenshots of a controller for creating a stereo pair in accordance with certain embodiments. The screenshots are from a computing device (e.g., a tablet computer, laptop, or desktop) used as a controller. Those skilled in the art can appreciate that FIGS. 10A-10F may be readily modified to be used in a portable device with network capability, such as, for example, iPhone or iTouch or other smart phone or other network-enabled devices. Additionally, the controller might exist as part of a player itself or directly/indirectly coupled to the player, and therefore such screenshots may be modified accordingly – such a controller need not have network capability as the player will have network connectivity.

[00123] FIG. 10A shows a graphic interface **1000** that may be displayed on a controller when a user desires to create a stereo pair with two players in a system. It is understood that the system may include two or more players. If a stereo pair is desired, such as discussed with respect to the example of FIGS. 10A-10F, then any two players (one or both of which may be a consolidated player) in the system may be paired. However, if pairing more than two players is desired, such as creating an environment which is capable of playing more than two channel audio data, then the graphic interface **1000** may include an additional option or options. For example, an option might include "Make a Movie Surround Sound Pairing," "Make a Music Surround Sound Pairing," or "Make a Dolby Pro Logic Pairing." Any descriptive language may be used to appropriately indicate to the user the type of pairing that can be created. Upon selecting an option, a setup wizard on the controller may help the user appropriately configure the system such that multi-channel discrete audio may be effectively realized by the system.

[00124] Turning back to FIG. 10A, the interface **1000** allows a user to initiate a stereo pair with a zone player named "ZPS5-Black." In certain embodiments, the system recognizes that ZPS5-Black is part of a particular zone (e.g., kitchen, family room, bedroom, and so on). The system may allow the user to pair ZPS5-Black with another player in the same zone only, or alternatively, the system may allow the user to pair ZPS5-Black with another player in a different zone (such as an adjacent zone). Pairing players in different zones may be particularly useful when an open space is divided into two or more zones (e.g., an open space might include a kitchen and family room, for example).

[00125] Additionally, the system may be programmed such that pairing players from different zones creates another zone to reflect the players in paired mode (e.g., a single kitchen-family room zone during paired operation might originate from a kitchen zone and a family room zone during non-paired operation). In such an embodiment, a user may be able to switch between zones or dynamically create new zones.

[00126] In certain embodiments, if another similar player is available to be paired, then the screenshot of FIG. 10B may be displayed. If the user wishes to continue with creating a pair, then the user may select "OK." If not, then the user may select "Cancel." In another embodiment, a different player (e.g., a player that is not an S5) may be paired together. That is, different types of players may be paired, if the players are so designed to be paired. To accommodate the differences in player type, the equalization of one or more players may be adjusted accordingly to compensate for things like the number and size of speaker drivers used in one player versus the other player. In yet another embodiment, a list of the players in the system may be displayed (not shown), from which the user selects two or more players to make the stereo pair. The list of players may be automatically determined by the system based on a player's particular location within a home, room, or configuration with other players within a room, for example.

[00127] Turning now to FIG. 10C, in this example, it is assumed that the user may select a zone player named "ZPS5-White" to be paired with "ZPS5-Black" to create a stereo pair. If so desired, the user may select "OK" to proceed with the pairing. Otherwise, the user may select "Cancel." In certain embodiments, ZPS5-White may be in the same zone as ZPS5-Black. In other embodiments, ZPS5-White may be in a different zone as ZPS5-Black.

[00128] Upon selecting "OK" in FIG. 10C, a screenshot like that of FIG. 10D may be displayed to the user, thereby instructing the user to press the mute button (or some other designated button) on the "LEFT" player of the stereo pair. Further, a light on the players may flash to further indicate that each of the players is a possibility for left channel pairing. Upon selection of the left player, FIG. 10E may be displayed to inform the user that a pair has been created along with a name for the pair, if so desired. Responsively, the system will play the left channel audio from the user designated player and will automatically play the right channel audio from the other player. FIG. 10F provides an example screenshot to allow the user to separate the stereo pair if so desired.

[00129] In an alternative embodiment, the creation of a stereo pair may be an option for a particular zone or a number of zones (e.g., a household of zones). For example, an option like "Create a Stereo Pair" may exist such that upon selection, a setup wizard may launch asking the user to press a flashing mute button (or some other designated button) on whichever speaker the user wanted to be the left speaker in the zone, a portion of zones, or all of the zones. In one embodiment, flashing would occur for all of the same speaker types. In another embodiment, flashing would occur for all speaker types that are capable of being paired. After choosing the left speaker, the wizard screen would ask the user to do the same for the right speaker. Preferably, only the speakers that are capable of being paired as the right speaker are flashing so as to appropriately narrow the choices for the user.

[00130] Additionally, in one embodiment and as shown in FIG. 3A or 3B, a graphic display is provided to show to the user all the players in a system and how they are grouped or named. A nickname for the stereo pair in the display **1040** may be highlighted and would be further displayed in FIG. 3A if FIG. 3A is modified after the stereo pair is complete

[00131] A similar graphic interface may be used to create a pair in an environment having more than two channels. For example, in a home theater environment, the system may list more than two separate players from which the user can create a pairing by selecting which player is to operate as the front right, center, front left, rear right, and rear left. A subwoofer may also be added to the list, so that it can be integrated into the multi-channel pairing by the user.

[00132] As an example, similar to what is described in the various embodiments above with respect to creating a stereo pair, the system may flash an indicator light on all relevant players and a setup wizard may ask the user to select the "front-left," then the "front-right," then the "front-center," then the "rear-left," then the "rear-right," and so on until all of the players are appropriately paired. Preferably, only the speakers that are capable of being paired as the next speaker are flashing so as to appropriately narrow the choices for the user.

VII. Example Smart line-in processing

[00133] FIG. 11 shows an example configuration of smart line-in processing, in accordance to an embodiment. System **1100** includes a playback device **1102**, a first source **1104**, a second source **1106** having a line-in connector **1108**, and an audio device **1110**. The playback device **1102** and any of the first source **1104** and the second source **1106** may be components of a single apparatus (e.g., a single playback device), or the playback device **1102** may be separate from any of the first source **1104** and second source **1106** and communicate with one another, such as over a wired or wireless network. By way of illustration, the playback device **1102** may be a zone player or playback device such as shown in FIGS. 1, 2A, 7, and 8. Additionally, it is understood that first source **1104** and second source **1106** may also each be a playback device, such as described herein.

[00134] In certain embodiments, the playback device **1102** is idle and therefore not producing sound. Alternatively, the playback device **1102** is configured to receive and play a first audio data stream from the first source **1104**. The playback device **1102** is further capable to receive and play a second audio data stream from the second source **1106**. The second source **1106** is coupled to an audio device **1110** through a line-in connector **1108** on the second source **1106**. Line-in connector **1108** may include a TRS type connector/socket (e.g., a TRS connector may be referred to as an audio jack, jack plug, stereo plug, mini-jack, and mini-stereo). Other types of connectors may also be used depending on the application. Further, a digital audio connection may be made instead of an analog audio connection. Such as described above, an example audio device **1110** may include a wireless networking device, such as an AirPort Express, which is a product that is commercially offered for sale by Apple, Inc.

[00135] A listener (e.g., user of **1100**) commands the audio device **1110** to play audio (e.g., via a separate control interface like an iTunes music controller). The second source **1106** is configured, such that when a signal is detected on the line-in connector **1108**, the second source

1106 automatically switches the playback device **1102** to play audio from the audio device **1110** via the second audio data stream. The switch to play audio from the audio device **1110** may optionally be performed only after the second source **1106** detects a signal on the line-in connector **1108** for a threshold time (e.g., 300 milliseconds or less). It is understood that the playing of the second audio data stream may override the playing of the first audio data stream, if the playback device **1102** was receiving and/or playing audio from the first source **1104**. Additionally, when the playback device **1102** is automatically switched to play audio from the second source **1106**, where the second source **1106** receives the audio from the audio device **1110** coupled to the second source **1106** via the line-in connector **1108**, the volume of the playback device **1102** is modified to a second volume level. The second volume level is set such that increased dynamic range is given to a volume control of the audio device **1110** connected via line-in to the second source **1106**.

[00136] In another illustration, the playback device **1102** is configured to receive and play audio from the second source **1106**. During play, a listener commands the playback device **1102** via a controller (such as shown in FIG. 2D) to instead play the first audio data stream from the first source **1104**. Upon receipt of the command, the playback device **1102** switches to play the first audio data stream. The playback device **1102** subsequently instructs the second source **1106** to stop sending the audio of the audio device **1110** to the playback device **1102**. The second source **1106** stops sending the audio to the playback device **1102** and waits until it no longer detects a signal on its line-in connector **1108** for an interval of time. When a signal is not detected on the line-in connector **1108** for the interval of time (e.g., 13 seconds or less), the second source **1106** is ready to automatically switch the playback device **1102** to play audio from the audio device **1110**, should the second source **1106** once again detect a signal on its line-in connector **1108**. Additionally, when the playback device **1102** switches to play the first audio data stream, the volume of the playback device **1102** is returned to a safe volume level such that

the audio is not played back to the listener at a high level. While a high level may be programmed to taste, an example of a safe volume level is less than 100 db.

VII. Conclusion

[00137] The components, elements, and/or functionality of the systems discussed above may be implemented alone or in combination in various forms in hardware, firmware, and/or as a set of instructions in software, for example. Certain embodiments may be provided as a set of instructions residing on a computer-readable medium, such as a memory, hard disk, CD-ROM, DVD, and/or EPROM, for execution on a processing device, such as a controller and/or playback device.

[00138] Various inventions have been described in sufficient detail with a certain degree of particularity. It is understood to those skilled in the art that the present disclosure of embodiments has been made by way of examples only and that numerous changes in the arrangement and combination of parts may be resorted without departing from the spirit and scope of the invention as claimed. While the embodiments discussed herein may appear to include some limitations as to the presentation of the information units, in terms of the format and arrangement, the embodiments have applicability well beyond such embodiment, which can be appreciated by those skilled in the art. Accordingly, the scope of the present invention is defined by the appended claims rather than the forgoing description of embodiments.

DocuSign Envelope ID: EC181A0F-153D-4DDC-9D63-E53BDD9ECDCC

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	Smart Line-In Processing In a Group

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14/561,421

filed on 05-Dec-2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Nicholas A.J. Millington

Signature: DocuSigned by: Nicholas A.J. Millington D19DFCAD2158435...

Date (Optional): 2016-07-28

/Nicholas A.J. Millington/

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.

DocuSign Envelope ID: EC181A0F-153D-4DDC-9D63-E53BDD9ECDCC

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	Smart Line-In Processing In a Group

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14/561,421

filed on 05-Dec-2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Tom Cullen Date (Optional): 2016-07-16

Signature: DocuSigned by: Tom Cullen 72CB6EE70FA04C5... /Tom Cullen/

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.

DocuSign Envelope ID: EC181A0F-153D-4DDC-9D63-E53BDD9ECDCC

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	Smart Line-In Processing In a Group

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14/561,421

filed on 05-Dec-2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Robert Reimann Date (Optional): 2016-07-12

Signature: DocuSigned by: Robert Reimann 8D53465BB1694A7...

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.

DocuSign Envelope ID: EC181A0F-153D-4DDC-9D63-E53BDD9ECDCC

PTO/AIA/01 (06-12)
Approved for use through 01/31/2014. OMB 0651-0032
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.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of Invention	Smart Line-In Processing In a Group

As the below named inventor, I hereby declare that:

This declaration is directed to:

☐ The attached application, or

☒ United States application or PCT international application number 14/561,421

filed on 05-Dec-2014.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Brent Lehman

Date (Optional): 2016-07-22

Signature: DocuSigned by: Brent Lehman D89B4170A3B54F4... /Brent Lehman/

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form or must have been previously filed. Use an additional PTO/AIA/01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 1 minute 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.