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
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R

CONFIRMATION NO. 9548

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

POA ACCEPTANCE LETTER

OC000000112244019

Date Mailed: 10/29/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/28/2019.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

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**.

/rbell/

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
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R

CONFIRMATION NO. 9548

130085
Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

POWER OF ATTORNEY NOTICE

OC000000112243973

Date Mailed: 10/29/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/28/2019.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

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**.

/rbell/

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

Bib Data Sheet

CONFIRMATION NO. 9548

SERIAL NUMBER	FILING OR 371(c) DATE / RULE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
90/013,959	06/16/2017	709	3992	04-0401-REEXAM (14-1800-R

AIA (First Inventor to File): YES

INVENTORS

9213357, Residence Not Provided;
SONOS, INC., SANTA BARBARA, CA;
CHRISTOPHER J. ROURK (3RD PTY REQ.), DALLAS, TX;

APPLICANTS

MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP, DALLAS, TX

**** CONTINUING DATA ***************************

This application is a REX of 14/516,867 10/17/2014 PAT 9213357
which is a CON of 13/297,000 11/15/2011 PAT 9182777
which is a CON of 10/816,217 04/01/2004 PAT 8234395
which claims benefit of 60/490,768 07/28/2003

**** FOREIGN APPLICATIONS *********************

Foreign Priority claimed ☐ yes ☐ no 35 USC 119 (a-d) conditions met ☐ yes ☐ no ☐ Met after Allowance Verified and Acknowledged Examiner's Signature Initials	STATE OR COUNTRY	SHEETS DRAWING	TOTAL CLAIMS	INDEPENDENT CLAIMS
			20	3

ADDRESS
107361

TITLE

OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK

FILING FEE RECEIVED	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time)

12000	No. _____ for following:	☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

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 Acknowledgement Receipt	
EFS ID:	37572388
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	130085
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	28-OCT-2019
Filing Date:	16-JUN-2017
Time Stamp:	00:02:24
Application Type:	Reexam (Third Party)

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	Power of Attorney	POA.pdf	162646 630d059197862054c8f129e51fe30a892006b7e8	no	1

Warnings:

Information:	
Total Files Size (in bytes):	162646

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.

US009213357C1

(12) EX PARTE REEXAMINATION CERTIFICATE (11583rd)

United States Patent
Millington

(10) Number: US 9,213,357 C1
(45) Certificate Issued: *Oct. 4, 2019

(54) **OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK**

(71) Applicant: **Sonos, Inc.**, Santa Barbara, CA (US)

(72) Inventor: **Nicholas A. J. Millington**, Santa Barbara, CA (US)

(73) Assignee: **Sonos, Inc.**

Reexamination Request:
No. 90/013,959, Jun. 16, 2017

Reexamination Certificate for:
Patent No.: **9,213,357**
Issued: **Dec. 15, 2015**
Appl. No.: **14/516,867**
Filed: **Oct. 17, 2014**

(*) Notice: This patent is subject to a terminal disclaimer.

Related U.S. Application Data

(63) Continuation of application No. 13/297,000, filed on Nov. 15, 2011, now Pat. No. 9,182,777, which is a (Continued)

(51) **Int. Cl.**

G06F 15/16	(2006.01)
G06F 3/0484	(2013.01)
G06F 3/0482	(2013.01)
H03G 3/00	(2006.01)
H04H 20/10	(2008.01)
H04H 20/26	(2008.01)
G05B 15/02	(2006.01)
G11B 20/10	(2006.01)
H04N 5/04	(2006.01)
H04N 9/79	(2006.01)
H04N 21/43	(2011.01)
H04N 21/436	(2011.01)
H04L 29/08	(2006.01)
G06F 3/16	(2006.01)
G06F 3/048	(2013.01)
H04L 29/06	(2006.01)

(Continued)

(52) **U.S. Cl.**
CPC ***G06F 3/165*** (2013.01); ***G11B 20/10527*** (2013.01); ***H04H 20/103*** (2013.01); ***H04H 20/26*** (2013.01); ***H04L 65/4076*** (2013.01); ***H04L 65/60*** (2013.01); ***H04L 65/80*** (2013.01); ***H04L 67/1095*** (2013.01); ***H04L 67/26*** (2013.01); ***H04L 69/28*** (2013.01); ***H04N 5/04*** (2013.01); ***H04N 9/7904*** (2013.01); ***H04N 21/4307*** (2013.01); ***H04N 21/43615*** (2013.01); ***H04R 3/12*** (2013.01); ***H04R 27/00*** (2013.01); ***H04W 56/0015*** (2013.01); *G11B 2020/10592* (2013.01); *H04H 2201/20* (2013.01); *H04R 2227/003* (2013.01); *H04R 2227/005* (2013.01)

(58) **Field of Classification Search**
None
See application file for complete search history.

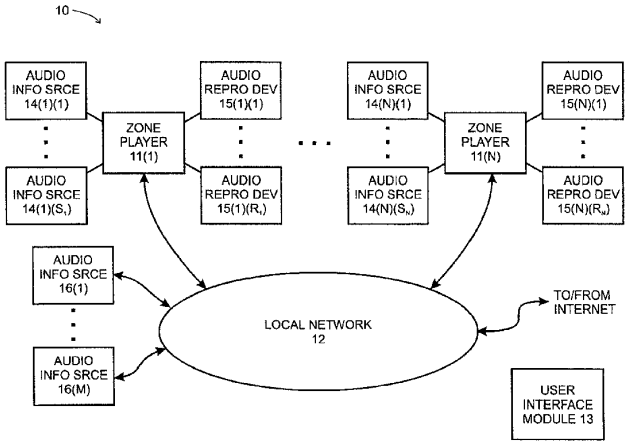
(56) **References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/013,959, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner — David E England

(57) **ABSTRACT**

Examples include a playback device with a network interface and memory with program instructions that, when executed by the processor, cause the playback device to (a) receive, via the network interface from a network device communicatively coupled to the playback device over a LAN, an address identifying a network location of audio information available at an audio information source, where the audio information source is outside of the LAN, (b) obtain, via the network interface from the audio information source, the audio information, (c) transmit, via the network interface to another playback device, the audio information, and (d) play back the audio information.



Related U.S. Application Data

continuation of application No. 10/816,217, filed on Apr. 1, 2004, now Pat. No. 8,234,395.

(60) Provisional application No. 60/490,768, filed on Jul. 28, 2003.

(51) **Int. Cl.**

H03G 3/20	(2006.01)
G06F 17/00	(2019.01)
H04R 27/00	(2006.01)
H04J 3/06	(2006.01)
G06F 1/00	(2006.01)
H04R 3/12	(2006.01)
G06F 17/30	(2006.01)
H04W 56/00	(2009.01)

EX PARTE REEXAMINATION CERTIFICATE

NO AMENDMENTS HAVE BEEN MADE TO THE PATENT

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

The patentability of claims **9**, **10**, **11**, **12** and **19** is confirmed.

Claims **1-8**, **13-18** and **20** were not reexamined.

* * * * *

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

130085 7590 09/13/2019

Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
09/13/2019	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

MR. CHRISTOPHER JOHN ROURK JACKSON
WALKER LLP
2323 ROSS AVENUE
SUITE 600
DALLAS, TX 75201

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/013,959* .

PATENT UNDER REEXAMINATION *9213357* .

ART UNIT *3992* .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Notice of Intent to Issue Ex Parte Reexamination Certificate	**Control No.** 90/013,959	**Patent Under Reexamination** 9213357	
	Examiner DAVID E ENGLAND	**Art Unit** 3992	**AIA Status** No

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

1. ☑ Prosecution on the merits is (or remains) closed in this *ex parte* reexamination proceeding. This proceeding is subject to reopening at the initiative of the Office or upon petition. *Cf.* 37 CFR 1.313(a). A Certificate will be issued in view of
   (a) ☐ Patent owner's communication(s) filed: _____.
   (b) ☐ Patent owner's failure to file an appropriate timely response to the Office action mailed: _____.
   (c) ☐ Patent owner's failure to timely file an Appeal Brief (37 CFR 41.31).
   (d) ☑ The decision on appeal by the ☑ Board of Patent Appeals and Interferences ☑ Court dated 31 May 2019
   (e) ☑ Other: See PTAB Decision 05/31/2019 for a specific explanation about the decision.
2. The Reexamination Certificate will indicate the following:
   (a) Change in the Specification: ☐ Yes ☑ No
   (b) Change in the Drawing(s): ☐ Yes ☑ No
   (c) Status of the Claim(s):
      (1) Patent claim(s) confirmed: 9-12 and 19.
      (2) Patent claim(s) amended (including dependent on amended claim(s)): _____
      (3) Patent claim(s) canceled: _____.
      (4) Newly presented claim(s) patentable: _____.
      (5) Newly presented canceled claims: _____.
      (6) Patent claim(s) ☐ previously ☐ currently disclaimed: _____
      (7) Patent claim(s) not subject to reexamination: 1-8,13-18 and 20.
3. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
4. ☐ Note the attached statement of reasons for patentability and/or confirmation. Any comments considered necessary by patent owner regarding reasons for patentability and/or confirmation must be submitted promptly to avoid processing delays. Such submission(s) should be labeled: "Comments On Statement of Reasons for Patentability and/or Confirmation."
5. ☐ Note attached NOTICE OF REFERENCES CITED (PTO-892).
6. ☐ Note attached LIST OF REFERENCES CITED (PTO/SB/08 or PTO/SB/08 substitute).
7. ☐ The drawing correction request filed on _____ is: ☐approved ☐disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐None of the certified copies have
   ☐been received.
   ☐not been received.
   ☐been filed in Application No. _____.
   ☐been filed in reexamination Control No. _____.
   ☐been received by the International Bureau in PCT Application No. _____.

   * Certified copies not received: _____.
9. ☐ Note attached Examiner's Amendment.
10. ☐ Note attached Interview Summary (PTO-474).
11. ☐ Other: _____.

All correspondence relating to this reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

/DAVID E ENGLAND/ Primary Examiner, Art Unit 3992	Conferee: /Roland Foster/, Primary Examiner, AU 3992 /MF/

cc: Requester (if third party requester)

Reexamination	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Certificate Date	Certificate Number
		C1

Requester Correspondence Address: ☐ Patent Owner ☑ Third Party
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	09 September 2019 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., 1:16cv00141 (CLOSED)		/MF/for JC

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Examiner	Art Unit
	DAVID E ENGLAND	3992

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
searched prior art from IDS	7/17/17	/DE/
reviewed IDS	10/18/2017	/DE/
Reviewed IDS and prior art	2/23/2018	/DE/
Reviewed PTAB decision	09/09/2019	/DE/

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/DAVID ENGLAND/ Primary Examiner.Art Unit 3992	

LINKPLAY EXHIBIT 1004
Page 15 of 4822

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Examiner	Art Unit
	DAVID E ENGLAND	3992

CPC						
Symbol					Type	Version
G06F	/	3	/	165	F	2013-01-01
H04R	/	3	/	12	I	2013-01-01
H04L	/	65	/	60	I	2013-01-01
H04W	/	56	/	0015	I	2013-01-01
H04N	/	21	/	4307	I	2013-01-01
H04R	/	27	/	00	I	2013-01-01
H04N	/	5	/	04	I	2013-01-01
H04L	/	67	/	1095	I	2013-01-01
H04L	/	67	/	26	I	2013-01-01
H04N	/	9	/	7904	I	2013-01-01
H04L	/	69	/	28	I	2013-01-01
H04L	/	65	/	4076	I	2013-01-01
H04N	/	21	/	43615	I	2013-01-01
H04H	/	20	/	103	I	2013-01-01
G11B	/	20	/	10527	I	2013-01-01
H04H	/	20	/	26	I	2013-01-01
H04L	/	65	/	80	I	2013-01-01
G11B	/	2020	/	10592	A	2013-01-01
H04H	/	2201	/	20	A	2013-01-01
H04R	/	2227	/	003	A	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)	20	
/DAVID E ENGLAND/ Primary Examiner, Art Unit 3992	09 September 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20190909

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Examiner	Art Unit
	DAVID E ENGLAND	3992

INTERNATIONAL CLASSIFICATION				
CLAIMED				
G06F	/	15	/	16
G06F	/	3	/	0484
G06F	/	3	/	0482
H03G	/	3	/	00
H04H	/	20	/	10
H04H	/	20	/	26
G05B	/	15	/	02
G11B	/	20	/	10
H04N	/	5	/	04
H04N	/	9	/	79
H04N	/	21	/	43
H04N	/	21	/	436
H04L	/	29	/	08
G06F	/	3	/	16
G06F	/	3	/	048
H04L	/	29	/	06
H03G	/	3	/	20
G06F	/	17	/	00
H04R	/	27	/	00
H04J	/	3	/	06
G06F	/	1	/	00
H04R	/	3	/	12
G06F	/	17	/	30

NON-CLAIMED				
	/		/	

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
709	219

NONE (Assistant Examiner)	(Date)	Total Claims Allowed: 20	
/DAVID E ENGLAND/ Primary Examiner, Art Unit 3992 (Primary Examiner)	09 September 2019 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 1

U.S. Patent and Trademark Office — Part of Paper No.: 20190909

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Examiner	**Art Unit**
	DAVID E ENGLAND	3992

CROSS REFERENCES(S)						
CLASS	**SUBCLASS (ONE SUBCLASS PER BLOCK)**					
709	219	220	231			

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/DAVID E ENGLAND/ Primary Examiner, Art Unit 3992	09 September 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office — Part of Paper No.: 20190909

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Examiner	Art Unit
	DAVID E ENGLAND	3992

☑ 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

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	20	
/DAVID E ENGLAND/ Primary Examiner, Art Unit 3992	09 September 2019	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	1

U.S. Patent and Trademark Office Part of Paper No.: 20190909

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

130085 7590 09/12/2019

Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
09/12/2019	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER J. ROURK

Appeal 2019-003250
Reexamination Control 90/013,959
Patent No. US 9,213,357 B2
Technology Center 3900

Before JAMILAH SULTAN, *TRIAL PARALEGAL*.

ERRATA

The Decision issued May 31, 2019, includes an error. The Decision misidentifies the reexamination control number as 90/013,861. The reexamination control number is 90/013,959. All other portions of the Decision remain unchanged.

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

130085 7590 05/31/2019

Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
05/31/2019	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER J. ROURK

Appeal 2019-003250
Reexamination Control 90/013,861[1]
Patent No. US 9,213,357 B2
Technology Center 3900

Before JOHN A. JEFFERY, MARC S. HOFF, and ERIC B. CHEN, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the rejection of claims 9–12 and 19. We have jurisdiction under 35 U.S.C. §§ 134(b) and 306.

We reverse.

The '357 patent issued to Millington on December 15, 2015. The '700 patent is a system and method for synchronizing operations among a number of digital data processing devices that are regulated by independent clocking devices, particularly a plurality of audio playback devices that receive digital audio information to be played back. A task distribution

[1] Appellant states that the real party in interest is Sonos, Inc. App. Br. 1.

device distributes tasks (e.g., audio information to be played back) to the devices. Each task is associated with a time stamp indicating a time at which the devices are to play back the audio in synchrony. Each respective device obtains the current time from the task distribution device and determines a time differential between that clock and the respective device's clock, so as to determine precisely when to execute the task in synchrony. '357 Patent col. 2:32–66.

Claim 9 is exemplary of the claims on appeal:

9. A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN;

and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii)transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing

information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to playback the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Millington	US 9,195,258 B2	Nov. 24, 2015
Edens	US 6,611,537 B1	Aug. 26, 2003
Blank	US 2004/0252400	Dec. 16, 2004
Gray, III	US 2002/0150053 A1	Oct. 17, 2002

Fries et al., *The MP3 and Internet Audio Handbook*, TeamCom Books (2000).

Throughout this decision, we make reference to Appellant's Brief ("App. Br.," filed Sept. 17, 2018), the Reply Brief ("Reply Br.," filed Jan. 7, 2019) and the Examiner's Answer ("Ans.," filed Nov. 5, 2018) for their respective details.

REJECTIONS

Claims 9-12 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blank, Gray, and APA.

ISSUE

Appellant's arguments present us with the following issue:

Has Appellant adduced objective evidence that leads to a conclusion that the claims under reexamination would not have been obvious to the person having ordinary skill in the art?

PRINCIPLES OF LAW

"There is a presumption of nexus for objective considerations when the patentee shows that the asserted objective evidence is tied to a specific product and that product 'is the invention disclosed and claimed in the patent.'" *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1329 (Fed. Cir. 2016); *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997). "A patent challenger may respond by presenting evidence that shows the proffered objective evidence was 'due to extraneous factors other than the patented invention.'" *Id.*; *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1393 (Fed. Cir. 1988). "However, a patent challenger cannot successfully rebut the presumption with argument alone – it must present evidence. *Id.*

ANALYSIS

Independent claim 9 recites, inter alia, transmitting playback timing information associated with audio information, via a network interface; playing back the audio information in synchrony by using the playback timing information associated with the audio information and the device clock information of the first playback device; wherein the first and second

playback devices remain independently clocked during synchronous playback.

Appellant argues that the Examiner erred in failing to give appropriate weight to its objective evidence of non-obviousness. App. Br. 24–25. Appellant has presented evidence that D&M engineers praised their product, characterizing it as "excellent synchronous playback," "amazing accuracy over IP network," and "the best [synchronization] I've ever heard." App. Br. 27. Appellant has presented evidence that D&M set out to copy their product. Appellant's evidence showed that "D&M was aware of, had access to, and copied Sonos products embodying the claimed synchronous playback." App. Br. 28. Appellants' evidence showed that even after allocating "70,240 hours" of employee time and "$5.33M," D&M had difficulty implementing Appellant's synchronous playback functionality. App. Br. 29.

Appellant has presented evidence that D&M set out to achieve the patented synchronous playback product, only to fail for years while expending thousands of man-hours and millions of dollars. App. Br. 29. Appellants' evidence showed that D&M engineers had no "concrete idea" how Sonos "can synchronize so perfectly." *Id.*

The Examiner did not rebut Appellant's evidence. The Examiner's response was confined to concluding that Appellants' argument was not persuasive, because Appellant's evidence failed to establish a nexus between the objective evidence presented and the limitations of the claimed invention. Ans. 12–13.

LINKPLAY EXHIBIT 1004
Page 27 of 4822

There is a presumption of nexus for such objective considerations as praise by competitors, copying, and failure of others, when the patentee shows that the asserted objective evidence is tied to a specific product and that product 'is the invention disclosed and claimed in the patent.'" *WBIP,* 829 F.3d at 1329.

We agree with Appellant's contention that the Examiner erred in holding Appellants' objective evidence to be unpersuasive. First, the Examiner's response to arguments, in the Answer, finds that Appellants did not state "what specific claimed feature from the litigation in the D&M case was considered novel enough for praise," and "what specific feature in the claim that accomplishes the Synchronous playback that sets Sonos above the competition." Ans. 11. We find that Appellant did, however, argue in the Brief, and again in the Reply Brief, that the D&M litigation concerned the synchronous playback features recited in Millington '258, which are substantially identical to the synchronous playback limitations recited in the '357 patent under reexamination. D&M was found to have willfully infringed the '258 Patent based upon the evidence of copying referenced by Appellant in the Brief. Reply Br. 12, 18. We agree that Appellant has tied their objective evidence to a specific product, which is the invention disclosed and claimed in the '258 Patent and the '357 Patent, which includes the synchronous playback feature that Appellant's competitor praised and sought to copy.

Second, in the Answer, the Examiner continues to insist that Appellant has not satisfied the legal requirements for establishing commercial success. Ans. 12. The Examiner's statements of the law

regarding commercial success are not relevant to the disposition of this appeal, because Appellants *have not presented evidence concerning the commercial success of the invention*. Rather, Appellant has presented unrebutted objective evidence concerning praise by a competitor, copying by a competitor, and failure of others.

The Examiner's finding that the '258 Patent claims multiple other features not found in the claims under reexamination is not persuasive to rebut Appellant's evidence that Appellant's synchronous playback feature was praised, was copied, and was the subject of long-felt need and failure of others. *See* Ans. 13. The Examiner merely suggests that some other feature or features gave rise to this praise, copying, etc. *Id.* The Examiner, however, points to no factual evidence tending to support a theory that any particular other feature or features, rather than the synchronous audio playback asserted by Appellant, motivated Appellant's competitor.

We conclude that Appellant's arguments concerning objective evidence of nonobviousness are persuasive to show Examiner error in asserting the prima facie obviousness of claims 9–12 and 19 over Blank, Gray, and APA. We need not reach Appellant's arguments concerning the prima facie obviousness of the claims over the cited references, because we conclude that the totality of Appellant's evidence of nonobviousness leads to the conclusion that the claims under reexamination would not have been obvious. We do not sustain the Examiner's § 103(a) rejection of claims 9–12 and 19.

CONCLUSION

Appellant has adduced objective evidence that leads to a conclusion that the claims under reexamination would not have been obvious to the person having ordinary skill in the art.

ORDER

The Examiner's decision to reject claims 9–12 and 19 is reversed.

REVERSED

LINKPLAY EXHIBIT 1004
Page 30 of 4822

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

130085 7590 05/31/2019

Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
05/31/2019	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHRISTOPHER J. ROURK

Appeal 2019-003250
Reexamination Control 90/013,861[1]
Patent No. US 9,213,357 B2
Technology Center 3900

Before JOHN A. JEFFERY, MARC S. HOFF, and ERIC B. CHEN, *Administrative Patent Judges*.

HOFF, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the rejection of claims 9–12 and 19. We have jurisdiction under 35 U.S.C. §§ 134(b) and 306.

We reverse.

The '357 patent issued to Millington on December 15, 2015. The '700 patent is a system and method for synchronizing operations among a number of digital data processing devices that are regulated by independent clocking devices, particularly a plurality of audio playback devices that receive digital audio information to be played back. A task distribution

---

[1] Appellant states that the real party in interest is Sonos, Inc. App. Br. 1.

device distributes tasks (e.g., audio information to be played back) to the devices. Each task is associated with a time stamp indicating a time at which the devices are to play back the audio in synchrony. Each respective device obtains the current time from the task distribution device and determines a time differential between that clock and the respective device's clock, so as to determine precisely when to execute the task in synchrony. '357 Patent col. 2:32–66.

Claim 9 is exemplary of the claims on appeal:

9. A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN;

and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii)transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing

information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to playback the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The Examiner relies upon the following prior art in rejecting the claims on appeal:

Millington	US 9,195,258 B2	Nov. 24, 2015
Edens	US 6,611,537 B1	Aug. 26, 2003
Blank	US 2004/0252400	Dec. 16, 2004
Gray, III	US 2002/0150053 A1	Oct. 17, 2002

Fries et al., *The MP3 and Internet Audio Handbook*, TeamCom Books (2000).

Throughout this decision, we make reference to Appellant's Brief ("App. Br.," filed Sept. 17, 2018), the Reply Brief ("Reply Br.," filed Jan. 7, 2019) and the Examiner's Answer ("Ans.," filed Nov. 5, 2018) for their respective details.

REJECTIONS

Claims 9-12 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blank, Gray, and APA.

ISSUE

Appellant's arguments present us with the following issue:

Has Appellant adduced objective evidence that leads to a conclusion that the claims under reexamination would not have been obvious to the person having ordinary skill in the art?

PRINCIPLES OF LAW

"There is a presumption of nexus for objective considerations when the patentee shows that the asserted objective evidence is tied to a specific product and that product 'is the invention disclosed and claimed in the patent.'" *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1329 (Fed. Cir. 2016); *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997). "A patent challenger may respond by presenting evidence that shows the proffered objective evidence was 'due to extraneous factors other than the patented invention.'" *Id.*; *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1393 (Fed. Cir. 1988). "However, a patent challenger cannot successfully rebut the presumption with argument alone – it must present evidence. *Id.*

ANALYSIS

Independent claim 9 recites, inter alia, transmitting playback timing information associated with audio information, via a network interface; playing back the audio information in synchrony by using the playback timing information associated with the audio information and the device clock information of the first playback device; wherein the first and second

playback devices remain independently clocked during synchronous playback.

Appellant argues that the Examiner erred in failing to give appropriate weight to its objective evidence of non-obviousness. App. Br. 24–25. Appellant has presented evidence that D&M engineers praised their product, characterizing it as "excellent synchronous playback," "amazing accuracy over IP network," and "the best [synchronization] I've ever heard." App. Br. 27. Appellant has presented evidence that D&M set out to copy their product. Appellant's evidence showed that "D&M was aware of, had access to, and copied Sonos products embodying the claimed synchronous playback." App. Br. 28. Appellants' evidence showed that even after allocating "70,240 hours" of employee time and "$5.33M," D&M had difficulty implementing Appellant's synchronous playback functionality. App. Br. 29.

Appellant has presented evidence that D&M set out to achieve the patented synchronous playback product, only to fail for years while expending thousands of man-hours and millions of dollars. App. Br. 29. Appellants' evidence showed that D&M engineers had no "concrete idea" how Sonos "can synchronize so perfectly." *Id.*

The Examiner did not rebut Appellant's evidence. The Examiner's response was confined to concluding that Appellants' argument was not persuasive, because Appellant's evidence failed to establish a nexus between the objective evidence presented and the limitations of the claimed invention. Ans. 12–13.

There is a presumption of nexus for such objective considerations as praise by competitors, copying, and failure of others, when the patentee shows that the asserted objective evidence is tied to a specific product and that product 'is the invention disclosed and claimed in the patent.'" *WBIP,* 829 F.3d at 1329.

We agree with Appellant's contention that the Examiner erred in holding Appellants' objective evidence to be unpersuasive. First, the Examiner's response to arguments, in the Answer, finds that Appellants did not state "what specific claimed feature from the litigation in the D&M case was considered novel enough for praise," and "what specific feature in the claim that accomplishes the Synchronous playback that sets Sonos above the competition." Ans. 11. We find that Appellant did, however, argue in the Brief, and again in the Reply Brief, that the D&M litigation concerned the synchronous playback features recited in Millington '258, which are substantially identical to the synchronous playback limitations recited in the '357 patent under reexamination. D&M was found to have willfully infringed the '258 Patent based upon the evidence of copying referenced by Appellant in the Brief. Reply Br. 12, 18. We agree that Appellant has tied their objective evidence to a specific product, which is the invention disclosed and claimed in the '258 Patent and the '357 Patent, which includes the synchronous playback feature that Appellant's competitor praised and sought to copy.

Second, in the Answer, the Examiner continues to insist that Appellant has not satisfied the legal requirements for establishing commercial success. Ans. 12. The Examiner's statements of the law

regarding commercial success are not relevant to the disposition of this appeal, because Appellants *have not presented evidence concerning the commercial success of the invention.* Rather, Appellant has presented unrebutted objective evidence concerning praise by a competitor, copying by a competitor, and failure of others.

The Examiner's finding that the '258 Patent claims multiple other features not found in the claims under reexamination is not persuasive to rebut Appellant's evidence that Appellant's synchronous playback feature was praised, was copied, and was the subject of long-felt need and failure of others. *See* Ans. 13. The Examiner merely suggests that some other feature or features gave rise to this praise, copying, etc. *Id.* The Examiner, however, points to no factual evidence tending to support a theory that any particular other feature or features, rather than the synchronous audio playback asserted by Appellant, motivated Appellant's competitor.

We conclude that Appellant's arguments concerning objective evidence of nonobviousness are persuasive to show Examiner error in asserting the prima facie obviousness of claims 9–12 and 19 over Blank, Gray, and APA. We need not reach Appellant's arguments concerning the prima facie obviousness of the claims over the cited references, because we conclude that the totality of Appellant's evidence of nonobviousness leads to the conclusion that the claims under reexamination would not have been obvious. We do not sustain the Examiner's § 103(a) rejection of claims 9–12 and 19.

CONCLUSION

Appellant has adduced objective evidence that leads to a conclusion that the claims under reexamination would not have been obvious to the person having ordinary skill in the art.

ORDER

The Examiner's decision to reject claims 9–12 and 19 is reversed.

REVERSED

LINKPLAY EXHIBIT 1004
Page 39 of 4822

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Sonos Docket No. 04-0401-REEXAM)
(Attorney Docket No. Sonos-00743)

RECEIVED
CENTRAL FAX CENTER
MAY 07 2019

In the *Ex Parte* Reexamination of:	
USP 9,213,357	**Group Art Unit No.: 3992**
Appeal No.: 2019-003250	
App. No.: 90/013,959	**Examiner: David E. England**
Filed: June 16, 2017	**Confirmation No.: 9548**
For: Obtaining Content from Remote Source for Playback	

ATTN: Patent Trial and Appeal Board Hearings Clerk
Fax Nos.: (571) 273-8300; (571) 273-9797

REQUEST FOR EQUIPMENT

On behalf of Sonos, Inc., the undersigned hereby requests an Elmo projector, a laptop projector, and a screen for the oral hearing scheduled for the above-captioned matter on May 13, 2019 in Alexandria, VA.

Respectfully submitted,

Dated: May 7, 2019

By: /Rory P. Shea/
Rory P. Shea
Reg. No. 60,529
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9609
shea@ls3ip.com

PAGE 2/2 * RCVD AT 5/7/2019 2:27:54 PM [Eastern Daylight Time] * SVR:W-PTOFAX-002/8 * DNIS:2738300 * CSID:6506556633 * ANI:3127549603 * DURATION (mm-ss):00-55

RECEIVED
CENTRAL FAX CENTER
MAY 07 2019

FAX

Date:	05/07/2019
Pages including cover sheet:	2

To:	
Phone	
Fax Phone	*(571) 273-8300*

From:	Danielle York
Phone	(312) 754-9602 * 9604
Fax Phone	13127549603

NOTE:

Please see the attached Request for Equipment

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
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R

CONFIRMATION NO. 9548

130085
Lee Sullivan Shea & Smith LLP
656 W. Randolph St.
Floor 5W
Chicago, IL 60661

POA ACCEPTANCE LETTER

OC000000107620453

Date Mailed: 04/24/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/22/2019.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

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**.

/rbell/

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
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R

CONFIRMATION NO. 9548

POWER OF ATTORNEY NOTICE

107361
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

OC000000107620410

Date Mailed: 04/24/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/22/2019.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

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**.

/rbell/

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

MCDONNELL BOEHNEN
HULBERT & BERGHOFF LLP
SONOS, INC.
300 SOUTH WACKER DRIVE
CHICAGO, IL 60606

Appeal No:	2019-003250
Appellant:	9213357, et al.
Reexam Control No:	90/013,959
Hearing Room:	A
Hearing Docket:	A
Hearing Date:	Monday, May 13, 2019
Hearing Time:	10:00 AM
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia 22313-1450**

NOTICE OF HEARING - ALEXANDRIA, VIRGINIA
RESPONSE REQUIRED WITHIN 21 DAYS

Your attention is directed to 37 CFR § 41.47. The above identified appeal will be heard by the Patent Trial and Appeal Board on the date indicated. Hearings will commence at the time set, and as soon as the argument in one appeal is concluded, the succeeding appeal will be taken up. **The time allowed for argument is 20 minutes** unless additional time is requested and approved before the argument commences. **As the hearing relates to an appeal from a reexamination, the hearing will be open to the public.**

CONFIRMATION OF ATTENDANCE OR WAIVER OF THE HEARING IS REQUIRED WITHIN **21 DAYS** OF THE MAILING DATE OF THIS NOTICE. Failure to respond may subject Appellant(s) to waiver of the oral hearing. If Appellant is no longer interested in having an oral hearing, Appellant must still file a waiver of oral hearing with the Board. This allows the panel to promptly act on the appeal without waiting for the oral hearing date.

Confirmation or waiver of the hearing should be indicated by completing the form below and returning it to the Board. This form may be filed with the Board by any one of the following three alternative methods:

1. Via the USPTO Electronic Filing System (EFS) at http://www.uspto.gov/patents/process/file/efs/
2. ***PREFERRED***: Facsimile transmitted to: The USPTO Central fax number (official copy): **(571) 273-8300** ***and*** the PTAB Hearing fax number (courtesy copy): **(571) 273-9797.**
3. By mail at the PTAB mailing address: Patent Trial and Appeal Board
   United States Patent and Trademark Office
   P.O. BOX 1450
   Alexandria, Virginia 22313-1450

In all communications relating to this appeal, please identify the appeal by its number.

PLEASE ELECT ONE OF THE OPTIONS BELOW:

(x) I ELECT AN IN-PERSON HEARING AND CONFIRM - ATTENDANCE IN **ALEXANDRIA, VIRGINIA** *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT A TELEPHONIC HEARING - ATTENDANCE CONFIRMED *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT A VIDEO HEARING - ATTENDANCE CONFIRMED *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT TO WAIVE HEARING ATTENDANCE *(EFS-Web selection: Waiver of Hearing by Appellant)*

To aid the oral hearings staff in scheduling hearing rooms, please indicate the total number of participating and observing attendees if more than three are expected: _____

To aid the judges in determining whether any conflicts exist that may require a recusal, please list in the 'Comments' section the names of any additional person(s) who will be participating in the oral hearing. (Upon arrival at the **Madison East Building, 9th floor**, all persons presenting arguments must sign in at the Usher's desk.)

Comments/Special Requests:

Attendees will be Rory Shea (Attorney of Record, Reg. 60,529), Michael Boyea (Attorney of Record, Reg. 70,248), and Chris Butts (Representative of Patentee, Reg. 67,558)

Rory P. Shea	60,529
Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
/Rory P. Shea/	4/24/2019
Signature of Attorney/Agent/Appellant	Date

The 'Hearings' section of the PTAB webpage http://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/hearings provides additional information about oral hearings.

Please direct other inquiries to the PTAB Hearings Clerk at 571-272-9797.

Electronic Acknowledgement Receipt	
EFS ID:	35812515
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	130085
Filer:	Rory Patrick Shea
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	24-APR-2019
Filing Date:	16-JUN-2017
Time Stamp:	10:00:19
Application Type:	Reexam (Patent Owner)

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	Confirmation of Hearing by Appellant	Confirm_of_Hearing_Final.pdf	249231 5d3271072b23f798632230b66a0fa7b0d1fb43bd	no	2

Warnings:

Information:					
2	Reexam Certificate of Service	Hearing_Confirm_COS.pdf	78670 1fa7e5e1227a17e4e8d7edc03a077ddc046ca898	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	327901		

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/81B (07-13)
Approved for use through 03/31/2021. 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

REEXAMINATION OR SUPPLEMENTAL EXAMINATION – PATENT OWNER POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS FOR REEXAMINATION OR SUPPLEMENTAL EXAMINATION AND PATENT

Control Number(s)	90/013,959
Filing Date(s)	June 16, 2017
First Named Inventor	Nicholas A.J. Millington
Title	Obtaining Content from Remote Source for Playback
Patent Number	9,213,357
Examiner Name	David E. England
Attorney Docket No(s)	04-0401-REEXAM

I. Power of Attorney. This form may be used to change the Power of Attorney in a reexamination or supplemental examination proceeding (or multiple proceedings where merged). This form may also be used to change the Power of Attorney in the patent file; in such a case, a copy of this form will be placed in both the patent file and the reexamination or supplemental examination proceeding.

A. Revocation of Previous Power of Attorney. I hereby revoke all previous patent owner powers of attorney, if any, given:

☒ in the above-identified reexamination or supplemental examination proceeding control number(s) (more than one may be changed only if the proceedings are merged).

☐ in the file of the above-identified patent.

(check BOTH boxes if change in BOTH the patent file and the reexamination or supplemental examination proceeding is requested).

B. Designation of Power of Attorney.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) to prosecute the proceeding(s)/patent identified above and selected in section I(A), and to transact all business in the United States Patent and Trademark Office connected therewith:

130085

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the proceeding(s) identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Authorization for the Power of Attorney is provided by the signature on page 2 of this form.

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 update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 15 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.

II. Change of Correspondence Address

Please recognize or change the correspondence address for the above-identified reexamination or supplemental examination proceeding control number(s) (more than one may be changed **only** if they are merged proceedings) **and for the file of the above-identified patent** to be:

■ The address associated with the above-identified Customer Number.
OR
☐ The address associated with the Customer Number identified in the box at right: ☐
OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

NOTE: THE CORRESPONDENCE ADDRESS FOR THE REEXAMINATION OR SUPPLEMENTAL EXAMINATION PROCEEDING CONTROL NUMBER(S) MUST BE THE SAME AS THAT FOR THE PATENT. SEE 37 CFR 1.33.

III. Authorization for Power of Attorney and (if selected) Change of Correspondence Address

I am the:
☐ Inventor, having ownership of the patent being reexamined.
OR
■ Patent owner.
Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

Signature of Inventor or Patent Owner	/Mark Triplett/	Date	4/22/2019
Name	Mark Triplett	Telephone	
Title and Company	VP Intellectual Property, Sonos, Inc.		

NOTE: Signatures of all the inventors or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

■ A total of 1 forms are submitted. *If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.*

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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Sonos Docket No. 04-0401-REEXAM)
(Attorney Docket No. Sonos-00743)

In the *Ex Parte* Reexamination of:	)	
	)	
USP 9,213,357	)	
	)	**Group Art Unit No.: 3992**
Appeal No.: 2019-003250	)	
	)	
App. No.: 90/013,959	)	**Examiner: David E. England**
	)	
Filed: June 16, 2017	)	
	)	**Confirmation No.: 9548**
For: Obtaining Content from Remote Source for Playback	)	
	)	

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

TRANSMITTAL OF POWER OF ATTORNEY

Enclosed is a signed Power of Attorney. The Assignee in the above-referenced patent hereby revokes all previous powers of attorney in the above-identified reexamination proceeding and appoints the practitioners associated with the Customer Number: 130085.

The Commissioner is authorized to charge any fee under 37 CFR 1.16 and 1.17 which may be required during the **entire pendency** of the application to Deposit Account No. 506632.

Respectfully submitted,

Dated: April 22, 2019

By: /Rory P. Shea/
Rory P. Shea
Reg. No. 60,529
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9609
shea@ls3ip.com

Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, IL 60661
(312)754-9602

Electronic Acknowledgement Receipt	
EFS ID:	35793221
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Rory Patrick Shea
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	22-APR-2019
Filing Date:	16-JUN-2017
Time Stamp:	18:38:23
Application Type:	Reexam (Patent Owner)

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	Assignee showing of ownership per 37 CFR 3.73	04-0401-REEXAM_373c_Statement.pdf	118706 eb37fd9555a19e05fcfcbc4d356312f57e9a8c02	no	3
Warnings:					

Information:					
2	Reexam Certificate of Service	Certificate_of_Service.pdf	78167 e266f98739eb36d2997a48f0637d4ee31eb04b64	no	1
Warnings:					
Information:					
3	Power of Attorney	04-0401-REEXAM_POA_AIA81B.pdf	501255 8f6c5fb83fc4592dd246fa3faa3c789b5345abbc	no	3
Warnings:					
Information:					
4	Transmittal Letter	04-0401-REEXAM_Transmittal_of_POA.pdf	82254 b35177a4a1eb4c633ab8f531e57a0dd5210a560a	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	780382		

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/96 (08-12)
Approved for use through 01/31/2013. 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.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: Sonos, Inc.

Application No./Patent No.: 9,213,357 Filed/Issue Date: 12/15/2015

Titled: Obtaining Content from Remote Source for Playback

Sonos, Inc., a Corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: Nicholas A.J. Millington To: Sonos, Inc.

   The document was recorded in the United States Patent and Trademark Office at

   Reel 035518, Frame 0127, or for which a copy thereof is attached.

2. From: _____ To: _____

   The document was recorded in the United States Patent and Trademark Office at

   Reel _____, Frame _____, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. 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/AIA/96 (08-12)
Approved for use through 01/31/2013. 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.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Rory P. Shea/	April 22, 2019
Signature	Date
Rory P. Shea	60,529
Printed or Typed Name	Title or Registration 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Sonos Docket No. 04-0401-REEXAM)
(Attorney Docket No. Sonos-00743)

In the *Ex Parte* Reexamination of:	)	
	)	
USP 9,213,357	)	
	)	**Group Art Unit No.: 3992**
Appeal No.: 2019-003250	)	
	)	
App. No.: 90/013,959	)	**Examiner: David E. England**
	)	
Filed: June 16, 2017	)	
	)	**Confirmation No.: 9548**
For: Obtaining Content from Remote Source for Playback	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that copies of the Power of Attorney and associated paperwork filed at the U.S. Patent Office on April 22, 2019 are being served via first class mail upon the following third-party requestor:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,

Dated: April 22, 2019

By: /Rory P. Shea/
Rory P. Shea
Reg. No. 60,529
Lee Sullivan Shea & Smith LLP
656 W. Randolph St., Floor 5W
Chicago, Illinois 60661
(312) 754-9609
shea@ls3ip.com

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 04/04/2019

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
04/04/2019	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.

The United States Patent and Trademark Office
PATENT TRIAL AND APPEAL BOARD

MCDONNELL BOEHNEN
HULBERT & BERGHOFF LLP
SONOS, INC.
300 SOUTH WACKER DRIVE
CHICAGO, IL 60606

Appeal No:	2019-003250
Appellant:	9213357, et al.
Reexam Control No:	90/013,959
Hearing Room:	A
Hearing Docket:	A
Hearing Date:	Monday, May 13, 2019
Hearing Time:	10:00 AM
Location:	**Madison Building - East Wing** **600 Dulany Street, 9th Floor** **Alexandria, Virginia 22313-1450**

NOTICE OF HEARING - ALEXANDRIA, VIRGINIA
RESPONSE REQUIRED WITHIN 21 DAYS

Your attention is directed to 37 CFR § 41.47. The above identified appeal will be heard by the Patent Trial and Appeal Board on the date indicated. Hearings will commence at the time set, and as soon as the argument in one appeal is concluded, the succeeding appeal will be taken up. **The time allowed for argument is 20 minutes** unless additional time is requested and approved before the argument commences. **As the hearing relates to an appeal from a reexamination, the hearing will be open to the public.**

CONFIRMATION OF ATTENDANCE OR WAIVER OF THE HEARING IS REQUIRED WITHIN **21 DAYS** OF THE MAILING DATE OF THIS NOTICE. Failure to respond may subject Appellant(s) to waiver of the oral hearing. If Appellant is no longer interested in having an oral hearing, Appellant must still file a waiver of oral hearing with the Board. This allows the panel to promptly act on the appeal without waiting for the oral hearing date.

Confirmation or waiver of the hearing should be indicated by completing the form below and returning it to the Board. This form may be filed with the Board by any one of the following three alternative methods:

1. Via the USPTO Electronic Filing System (EFS) at http://www.uspto.gov/patents/process/file/efs/
2. ***PREFERRED***: Facsimile transmitted to: The USPTO Central fax number (official copy): **(571) 273-8300** ***and*** the PTAB Hearing fax number (courtesy copy): **(571) 273-9797.**
3. By mail at the PTAB mailing address: Patent Trial and Appeal Board
   United States Patent and Trademark Office
   P.O. BOX 1450
   Alexandria, Virginia 22313-1450

In all communications relating to this appeal, please identify the appeal by its number.

PLEASE ELECT ONE OF THE OPTIONS BELOW:

( ) I ELECT AN IN-PERSON HEARING AND CONFIRM - ATTENDANCE IN **ALEXANDRIA, VIRGINIA** *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT A TELEPHONIC HEARING - ATTENDANCE CONFIRMED *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT A VIDEO HEARING - ATTENDANCE CONFIRMED *(EFS-Web selection: Confirmation of Hearing by Appellant)*

( ) I ELECT TO WAIVE HEARING ATTENDANCE *(EFS-Web selection: Waiver of Hearing by Appellant)*

To aid the oral hearings staff in scheduling hearing rooms, please indicate the total number of participating and observing attendees if more than three are expected: _____

To aid the judges in determining whether any conflicts exist that may require a recusal, please list in the 'Comments' section the names of any additional person(s) who will be participating in the oral hearing. (Upon arrival at the **Madison East Building, 9th floor**, all persons presenting arguments must sign in at the Usher's desk.)

Comments/Special Requests:

_____

_____

_____	_____
Typed or Printed Name of Attorney/Agent/Appellant	Registration No.
_____	_____
Signature of Attorney/Agent/Appellant	Date

The 'Hearings' section of the PTAB webpage http://www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/hearings provides additional information about oral hearings.

Please direct other inquiries to the PTAB Hearings Clerk at 571-272-9797.

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 03/25/2019

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
03/25/2019	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.

United States Patent and Trademark Office

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE, 32ND FLOOR
CHICAGO, IL 60606

Appeal No: 2019-003250
Ex Parte Reexamination Control No: 90/013,959
Appellant: Sonos, Inc., (Patent Owner)

Patent Trial and Appeal Board Docketing Notice

Ex Parte Reexamination Control No. 90/013,959 was received from the Technology Center at the Board on March 19, 2019 and has been assigned Appeal No: 2019-003250.

In all future communications regarding this appeal, please include both the *Ex Parte* Reexamination Control Number and the appeal number.

The mailing address for the Board is:

PATENT TRIAL and APPEAL BOARD
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

Telephone inquiries can be made by calling 571-272-9797 and referencing the appeal number listed above.

By order of the Patent Trial and Appeal Board.

MAT

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 03/25/2019
McDonnell Boehnen Hulbert & Berghoff LLP
Sonos, Inc.
300 South Wacker Drive
Chicago, IL 60606

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
03/25/2019	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

JACKSON WALKER, LLP

Attn: Christopher J. Rourk

2323 Ross Avenue, Suite 600

Dallas, TX 75201

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/013959*.

PATENT NO. *9213357*.

ART UNIT *3992*.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(e)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(e)).

PTO-465 (Rev.04-03)

United States Patent and Trademark Office

Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP
300 SOUTH WACKER DRIVE, 32ND FLOOR
CHICAGO, IL 60606

Appeal No: 2019-003250
Ex Parte Reexamination Control No: 90/013,959
Appellant: Sonos, Inc., (Patent Owner)

Patent Trial and Appeal Board Docketing Notice

Ex Parte Reexamination Control No. 90/013,959 was received from the Technology Center at the Board on March 19, 2019 and has been assigned Appeal No: 2019-003250.

In all future communications regarding this appeal, please include both the *Ex Parte* Reexamination Control Number and the appeal number.

The mailing address for the Board is:

PATENT TRIAL and APPEAL BOARD
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. BOX 1450
ALEXANDRIA, VIRGINIA 22313-1450

Telephone inquiries can be made by calling 571-272-9797 and referencing the appeal number listed above.

By order of the Patent Trial and Appeal Board.

MAT

cc: Third Party Requester

JACKSON WALKER, LLP
Attn: Christopher J. Rourk
2323 Ross Avenue
Suite 600
Dallas, TX 75201

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	
	)	

REPLY BRIEF

Jeffrey P. Armstrong
McDONNELL BOEHNEN
HULBERT & BERGHOFF LLP
300 South Wacker Drive
Chicago, Illinois 60606
(312) 913-0001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REPLY BRIEF

This Reply Brief is submitted pursuant 37 C.F.R. § 41.41, within two months from the Examiner's Answering Brief mailed on November 5, 2018. The Office is authorized to charge any underpayment or credit any overpayment in this matter to Deposit Account No. 13-2490.

TABLE OF CONTENTS

I. Status of the Claims 1

II. Argument 1

A. The Examiner's Answer still does not explain *why* a POSITA would have been motivated to combine Blank's media synch player, time server, and control console into a single device 2

B. The clarification in the Examiner's Answer of *how* the proposed combination would work confirms that the rejection is based on hindsight reasoning that uses the claim language as a blueprint 6

C. The conclusory contentions regarding reasonable expectation of success in the Examiner's Answer contradict evidence showing that implementing the claimed invention was a complex engineering project fraught with uncertainty 8

D. The proffered reasons in the Examiner's Answer for modifying the proposed combination of Blank's devices to use Gray's "frame-specific time stamps" as playback timing for synchronous playback lacks a rational basis in the record 13

E. The contentions in the Examiner's Answer regarding the APA fail to overcome the deficiencies of Blank, Gray, and the proffered reasons for combining and modifying Blank and Gray 16

F. The Examiner's Answer confirms that the Examiner has improperly disregarded objective evidence of non-obviousness with a clear nexus to the claimed invention 17

III. Conclusion 20

TABLE OF AUTHORITIES

Cases

Cardiac Pacemakers v. St. Jude Medical,
381 F.3d 1371, 1377 (Fed. Cir. 2004) 17

In re Allen,
324 F.2d 993, 997 (CCPA 1963) 20

In re Larson,
340 F.2d 965 (CCPA 1965) 3

In re Nuvasive,
842 F.3d 1376, 1382 (Fed. Cir. 2016) 14, 16

In re Rinkevich,
BPAI, 2007-1317 at 9 (Decided May 29, 2007).....15

Personal Web Technologies v. Apple,
848 F.3d 987, 991 (Fed. Cir. 2017) 3, 7

Phil-Insul v. Airlite Plastics,
854 F.3d 1344, 1359 (Fed. Cir. 2017) 7

Rexnord v. Laitram,
274 F.3d 1336, 1342 (Fed. Cir. 2001) 7

Smith & Nephew v. Convatec,
IPR 2013-00097 (LMG), Paper 27, p. 7 (PTAB, Aug. 21, 2013) 20

WBIP v. Kohler,
829 F.3d 1317, 1328 (Fed. Cir. 2016) 18, 20

Statutes

35 U.S.C. § 103 ..... passim

I. Status of the Claims

Claims 9-12 and 19 of U.S. Pat. 9,213,357 (the '357 Patent) are rejected under § 103 based on U.S. 2004/0252400 ("Blank"), U.S. 2002/0150053 ("Gray"), and alleged Admitted Prior Art ("APA"); claims 9-12 and 19 are under appeal.

II. Argument

The Examiner's rebuttals, clarifications, and arguments in the Answering Brief ("Answer") do not remedy the multiple points of clear error in the § 103 rejection explained in Patentee's Appeal Brief.

First, the additional contentions and arguments in the Answer do not remedy the Examiner's failure to establish a *prima facie* case of obviousness. The Examiner's further arguments for ***why*** a Person of Ordinary Skill in the Art (POSITA) would have been motivated to combine Blank's media synch player, time server, and control console into a single device are conclusory and lack support in the record. Answer, pp. 3-5. And the Examiner's further clarification of ***how*** the proposed combination would work confirms that the § 103 rejection is based on impermissible hindsight reasoning that uses the claim language as a blueprint for the proposed combination. *Id.* at 5-7. Additionally, the Examiner's continued reiteration of conclusory assertions that a POSITA could have made the claimed invention with a reasonable expectation of success, combined with the Examiner's continued refusal to consider actual evidence showing that making the claimed invention was a complex engineering project fraught with uncertainty for a POSITA, confirms that

the Examiner has improperly ignored facts that contradict the Examiner's apparently predetermined conclusion of obviousness. *Id.* at 7-8. And the Examiner's attempts to explain why a POSITA would have further modified the proposed combination of Blank's devices with the teachings of Gray and/or the APA lack support in the record and Federal Circuit case law. *Id.* at 8-10. Because the additional contentions and arguments in the Answer do not remedy the Examiner's failure to establish a *prima facie* case of obviousness, the Board should reverse the § 103 rejection.

Additionally, the Answer confirms that the Examiner has not considered objective evidence of non-obviousness having a nexus to the claimed invention, including extensive evidence of copying showing that D&M[1] used technical details from the '357 Patent and teardowns of Patentee's products to build a device that practiced the synchronous playback feature recited in claim 9 of the '357 Patent. *Id.* at pp. 11-13. The Examiner's continued refusal to consider the objective evidence of non-obvious is an additional clear error that warrants reversal.

A. The Examiner's Answer still does not explain ***why*** a POSITA would have been motivated to combine Blank's media synch player, time server, and control console into a single device

To support the legal conclusion of obviousness, the Examiner must provide, *inter alia*, a rational reason for ***why*** a POSITA at the time of the invention would have modified or combined the prior art components to arrive at the claimed

[1] D&M is the third-party requestor and adjudged willful infringer in the related litigation giving rise to the present *ex parte* reexamination.

invention. *Personal Web Technologies v. Apple*, 848 F.3d 987, 991 (Fed. Cir. 2017). The Examiner failed to meet this burden. Appeal Brief, pp. 8-15. Attempting to remedy this deficiency, the Examiner responded, "one of the motivations to combine the devices of Blank in one 'box'…is found in MPEP 2144.04 V.B. 'Making Integral' *In re Larson*, 340 F.2d 965 (CCPA 1965), i.e.,…making one means integral with another means… would be merely a matter of obvious engineering choice.')." Answer, pp. 3-4. The Examiner's reliance on *Larson* is misplaced and does not justify the conclusion of obviousness here.

In *Larson*, "[t]he essential difference between the [prior art] construction and [the claim] [was] the manner of connecting the brake disc or drum to the wheel hub." The CCPA reasoned that "the brake disc and clamp of [the prior art] comprise several parts [that] are rigidly secured together as a single unit," such that "[t]he constituent parts…constitute a unitary whole," and thus, using "a one piece construction [as claimed] instead of the [prior art] structure [was an] obvious engineering choice." 340 F2d at 967-68. Importantly, the prior art taught the same ***combination*** of components recited in the claim – the only difference was that the prior art combination was clamped together whereas the claimed combination was formed from a single piece of metal. *Id.* Thus, in *Larson*, the motivation to form the combination of components from one piece of metal flowed from a straightforward assumed benefit of making a prior art combination more rigid and stable.

The CCPA's reasoning in *Larson* does not extend to this case for multiple

reasons. First, unlike *Larson*, Blank does not teach the same ***combination*** of components recited in claim 9. Second, it is unreasonable to presume that a POSITA at the time of the invention would have been motivated to combine Blank's components into a single device in view of Blank's suggestion that combining the components would be undesirable in some instances. Blank, ¶ 95. Finally, combining Blank's components is a far more sophisticated task than simply forming a known combination of separate prior art components from one piece of metal.

In the rejection, the Examiner ignores the technical complexities and potential drawbacks that logically flow from the proposed combination. Appeal Brief, pp. 15-19; Sec. B, *infra*. And the Examiner cites no evidence for the conclusory contention that "this type of engineering choice would replicate what is seen in the market as a 'master or controller' or audio visual stereo receiver." Answer, p. 4. There is no evidence in the record about "master controllers" or "audio visual stereo receivers" performing the functions of claim 9 (apart from the devices in the '357 Patent), or evidence of a market for such devices as of the '357 Patent's 2003 priority date.

The Examiner's additional contentions that "combining these into 'one box' would shorten the distance and therefore time with the commands made between these devices, making latency very minimal and only require (sic) a user to purchase one device instead of several," Answer, p. 5, are post hoc motivations that lack a rational basis in the technical teachings of Blank. A POSITA would not have been motivated to combine Blank's devices into a single box to reduce command latency,

because command latency is not a problem for Blank's system. Blank acknowledges IP networks suffer from "delays, latency, jitters and other inherent network characteristics," but explains that Blank's system uses "'tight time' synchronization" to play A/V streams "in a synchronized manner ***despite the characteristics of typical IP networks***." Blank, ¶ 43 (emphasis added). Even if latency caused multiple media synch players to receive a command at slightly different times, the media synch players would still implement the received command at exactly the same time ("t+d") because "all of the media synch players 110 [are] synchronized to the same moment in time - t+d." Blank, ¶ 44.

Finally, there is no evidence in the record that a POSITA would have viewed "one device instead of several" as desirable in the context of Blank's system. Answer, p. 5. To the contrary, Blank suggests to a POSITA that separate components "avoid[] investment in large amounts of hardware…via provision of redundant elements of very expensive hardware for backup capability." Blank, ¶ 95. Combining Blank's components as the Examiner proposes would create "redundant elements of very expensive hardware" that Blank seeks to avoid. Indeed, replacing a single media synch player, time server, or control console would be less costly than replacing the Examiner's proposed device (i.e., a combination of a media synch player, time server, and control console). Ex.[2] A: Wolfe Dec., ¶¶ 50-56.

[2] The exhibits cited herein are the exhibits to Patentee's Appeal Brief.

Here, the Examiner has concocted a hindsight rationale to justify the combination in 2017-18 rather than articulating a reason why a POSITA in 2003 would have been motivated to make the proposed combination. Because the Examiner's arguments in the Answer do not remedy the Examiner's failure to provide a rational reason ***why*** a POSITA would have been motivated to combine Blank's components into a single "playback device," the Examiner has failed to establish a *prima facie* case of obviousness for at least this first independent reason.

B. The clarification in the Examiner's Answer of ***how*** the proposed combination would work confirms that the rejection is based on hindsight reasoning that uses the claim language as a blueprint

Patentee explained how the proposed combination of Blank's media synch player, time server, and control console introduces multiple technical complexities that are not contemplated by Blank or explained by the Examiner. Appeal Brief, pp. 15-19. In an attempt to wish away these complexities, the Examiner responded that "media sync player 1 is the only device in the system that has the additional components" while "Media Sync Player (N), which would be all other synch players, do not have the same configuration as…media synch player 1." Answer, pp. 5-6. The Examiner's reasoning suffers from multiple flaws.

First, claim 9 recites a "first playback device" and a "second playback device," so the Examiner's contention that the "first playback device" is a fundamentally different device than the "second playback device" is contrary to Federal Circuit precedent that "a claim term should be construed consistently with its appearance in

other places in the same claim." *Rexnord v. Laitram*, 274 F.3d 1336, 1342 (Fed. Cir. 2001). Second, the Examiner has provided no rational reason why a POSITA would have combined Blank's components to create two different types of playback devices and nothing in the record suggests that a POSITA would have been motivated to create a network of two different types of playback devices as the Examiner has proposed. To the contrary, the record shows that deploying a single type of playback device was advantageous. Ex. H: PTX 275 at D+M_0408322-30 ("every Sonos [player] can act like bridge, a switch, a wireless repeater, a synchronized source and a synchronized player" and "it is virtually impossible to hook to it up 'wrong'.").

"[A] clear, evidence-supported account of the contemplated workings of the combination is a prerequisite to adequately explaining and supporting a conclusion that a [POSITA] would have been motivated to make the combination." *Personal Web*, 848 F.3d at 994. The Examiner has failed to provide such an explanation. Instead, the Examiner's attempt to wish away the complexities that logically flow from the proposed combination with the contention that a POSITA would have combined Blank's components to create two different types of playback devices further confirms that the § 103 rejection is based on improper hindsight reasoning concocted to justify the proposed combination. Because the further clarifications and contentions in the Answer do not remedy the Examiner's failure to explain ***how*** the proposed combination would work, the Examiner has failed to establish a *prima*

facie case of obviousness for at least this second independent reason.

C. The conclusory contentions regarding reasonable expectation of success in the Examiner's Answer contradict evidence showing that implementing the claimed invention was a complex engineering project fraught with uncertainty

The Examiner contends, "all the case information given by the PO does not, in any way, connect the case mention[ed] with those patented claims to the actual claim language in this Re-exam," "[t]here is no evidence shown by the PO that connects the case to the claims and if the actual claim language is what was difficult to duplicate," and "[t]he description of the evidence and the evidence itself does not teach the limitations that are rejected or how D&M attempted to use the specific claim language to copy a Sonos product." Answer, pp. 7-8.[3] But the Examiner's contentions directly contradict facts in the record showing (i) D&M was aware of, had access to, and copied Sonos products embodying the patented synchronous playback feature, (ii) D&M used the technical details of the patented synchronous playback feature described in the '357 Patent specification in connection with its copying efforts, as confirmed by the verdict in the related litigation, and (iii) D&M struggled to copy Sonos's products despite having Sonos commercial products and Sonos patent filings as a roadmap. Appeal Brief, pp. 19-21, 23-29.

In January 2012, D&M outlined its goal to copy Sonos products. Ex. B: PTX

[3] The Examiner's other comments regarding "commercial success" are irrelevant because the Patentee has not cited evidence of commercial success.

198. D&M prepared a detailed engineering plan that tasked a large team of engineers with copying Sonos products; that team included Yuuji Kaneko.; Ex. C: PTX 200 at D+M_0161270. In November 2011, Kaneko prepared a report ("the Kaneko Report") that summarized an analysis of Sonos patent documents including U.S. App. 10/816,217. Ex. D: PTX 270, p. 1. The '357 Patent under reexamination is a continuation of U.S. App. 10/816,217; the '357 Patent and U.S. App. 10/816,217 share the same specification. And as described below, the synchronous playback feature recited in claim 9 of the '357 Patent is the same synchronous playback feature described in U.S. App. 10/816,217 and analyzed in the Kaneko Report. FIG. 1 maps the synchronous playback features of claim 9 to the Kaneko Report.

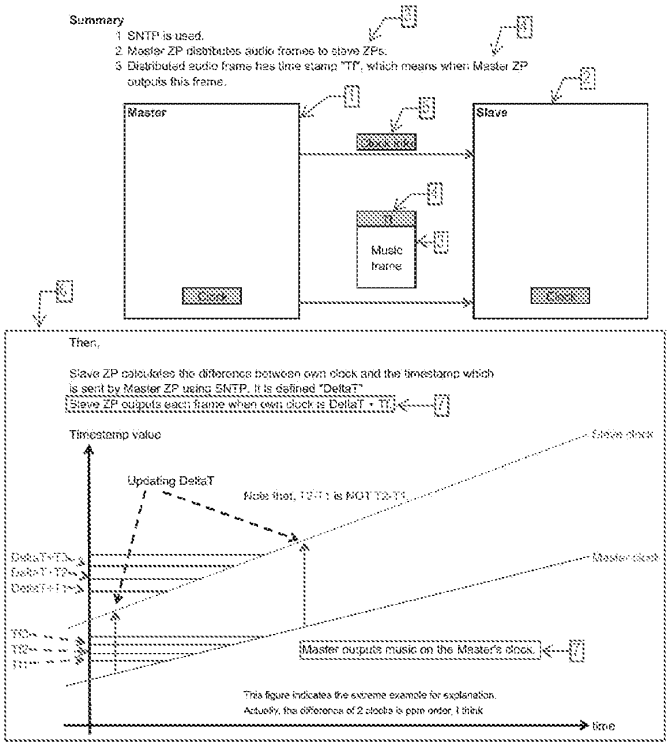


FIG. 1: Annotated Excerpt of the Kaneko Report (Ex. D: PTX 270, p. 3)

The Overview" section of the Kaneko Report states, "Sonos has excellent synchronous playback feature." Ex. D: PTX 270, p. 2. The technical details in the "Summary" section of the Kaneko Report confirm that the "synchronous playback feature" praised in the Kaneko Report is the ***same*** synchronous playback feature recited in claim 9 of the '357 Patent. Ex. D: PTX 270, p. 3. In FIG. 1, the Kaneko Report shows a "first playback device" **[1]** transmit[ing]…to a second playback device **[2]**, the audio information **[3]**, playback timing information associated with the audio information **[4]**, and device clock information of the first playback device **[5]**." The Kaneko Report also describes the how the "first playback device" **[1]** performs the claimed function of "play[ing] back the audio information **[3]** in synchrony with the second playback device **[2]** by using the playback timing information associated with the audio information **[4]** and the device clock information of the first playback device **[5]** to play back the audio information **[3]**," as shown in box **[6]** of FIG. 1. Finally, the Kaneko Report confirms that "the first and second playback devices remain independently clocked during synchronous playback of the audio information," showing that the master and slave each continue to output audio according to its "own clock" **[7]**. Ex. D: PTX 270, p. 3. The Kaneko Report's synchronous playback description matches the synchronous playback embodiments described in the '357 Patent. '357 Patent, 24:16-25:25.

D&M allocated substantial engineering resources to copying Sonos's synchronous playback feature. A 2012 D&M email summarizing D&M's plans

states, "for reproducing the Sonos functionality," the project would require "20 months, 439 man-months, and $5.33M," or 70,240 hours based on a 40-hour work week. Ex. B: PTX 198 at D+M_0161242. D&M's plan allocated 128 man-months (20,480 hours) just to copying Sonos's synchronous playback feature. Ex. C: PTX 200 at D+M_0161268. Importantly, D&M's engineering estimates are from January 2012, ***after*** D&M had the benefit of the technical analysis in the Kaneko Report prepared in November 2011. D&M's engineers are unquestionably persons of ordinary skill in the art, and many are arguably experts in the field, and they knew that copying Sonos's synchronous playback feature would be no easy task. The level of technical analysis and detail in the Kaneko Report and D&M's engineering plan shows the degree of actual effort that a POSITA had to undertake to arrive at the claimed invention – it was not a simple matter of combining and modifying Blank's components with a mere hand wave as the Examiner contends.

During D&M's copying efforts, Kaneko's teammates (e.g., Hongo and Takasu listed at Ex. C: PTX 200 at D+M_0161270) participated in discussions about the challenges and uncertainties encountered while copying Sonos's synchronous playback feature. Ex. E: PTX 146 at D+M0072389 ("Do we have any idea how they can synchronize so perfectly?"; "As of now we do not have any concrete idea, but we believe some driver level implementation is used in both of network driver and audio driver…, though it's only a guess.").

After years of engineering effort, millions of dollars, and tens of thousands of

man hours, D&M finally produced a device replicating Sonos's synchronous playback feature. And a jury concluded D&M's device infringed claim 17 of U.S. Pat. 9,195,258 (the '258 Patent). Ex. F: Verdict at p. 2. Claim 17 of the '258 Patent is reproduced in the Jury Instructions. Ex. J: Jury Instructions, p. 23. Importantly, the synchronous playback feature in claim 17 of the '258 Patent is the ***same*** synchronous playback feature described in the Kaneko Report and recited in claim 9 of the '357 Patent. Figure 2 shows a comparison of a relevant excerpt of claim 17 of the '258 Patent and a relevant excerpt of claim 9 of the '357 Patent.

Claim 9 of the '357 Patent (relevant excerpt)	**Claim 17 of the '258 Patent (relevant excerpt)**
"…cause the first playback device to:…"	"…the first and second zone players are configured to…"
"(ii) transmit, via the network interface of the first playback device to a second playback device,…playback timing information associated with the audio information, and device clock information of the first playback device"	"wherein the generated playback timing information and the clock time information are transmitted from the one of the first or second zone players to the other of the first or second zone players"
"(iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information"	"playback audio in synchrony based at least in part on (i) audio content, (ii) playback timing information associated with the audio content…, and (iii) clock time information for the one of the first or second zone players,"
"wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information"	"wherein the first and second zone players remain independently clocked while playing back audio in synchrony"

FIG 2: Comparison of Claimed Synchronous Playback Features

Thus, the evidence shows that D&M used Sonos patent documents in furtherance of its copying efforts, struggled with uncertainties while copying the synchronous playback feature, and after great effort, ultimately created a device that infringed the synchronous playback feature recited in claim 9 of the '357 Patent. The Examiner's contention that "the evidence itself does not teach the limitations that are rejected or how D&M attempted to use the specific claim language to copy a Sonos product" simply ignores inconvenient facts that contradict the Examiner's predetermined conclusion of obviousness. Moreover, the evidence contradicts the Examiner's conclusory assertions that the proposed combination "would not require undue experimentation, "would not make an overly complicated device," and "making devices integral is not only well known in the art…but would have lead to a reasonable expectation of success." FOA, pp. 7-9.

Because the Examiner's contentions in the Answer do not remedy the Examiner's failure to show that a POSITA at the time of invention could have created the claimed invention with a reasonable expectation of success, particularly in view of record evidence to the contrary, the Examiner has failed to establish a *prima facie* case of obviousness for at least this third independent reason.

D. The proffered reasons in the Examiner's Answer for modifying the proposed combination of Blank's devices to use Gray's "frame-specific time stamps" as playback timing for synchronous playback lacks a rational basis in the record

The Examiner states, "there are THREE versions, i.e. Construction 1,

Construction 2, and APA interpretation, of the rejection when it comes to the interpretation of [the] 'playback timing' element." Answer, p. 8.

First, regarding "Construction 1," the Examiner contends, "the PO has stated on the record that Blank teaches this limitation and therefore agrees with the Examiner in the first version of the rejection." Answer, p. 9. That is not true. To the contrary, Patentee explained that "Blank already discloses a satisfactory playback timing solution for synchronous playback, albeit a ***different*** solution than what is recited in the claims." Appeal Brief, p. 12 (emphasis added).

Regarding "Construction 2," the Examiner contends it would have been obvious to modify the combination of Blank's devices to use Gray's "frame-specific time stamps" as playback timing for synchronous playback as recited in claim 9. Answer, p. 9. The Federal Circuit has explained that an obviousness rejection must "***articulate a reason why*** a PHOSITA would combine the prior art references" with "a satisfactory explanation" having "a rational connection between the facts found and the choice made" in combining the prior art in the manner proposed in the rejection to arrive at the claimed invention. *In re Nuvasive*, 842 F.3d 1376, 1382 (Fed. Cir. 2016) (emphasis original). The Examiner's proffered motivation falls far short of this standard because the motivation lacks any "rational connection between the facts found and the choice made" for at least two reasons.

First, Blank already discloses a satisfactory playback timing solution for synchronous playback, albeit a different solution than what is recited in claim 9. Ex.

A: Wolfe Dec., ¶ 57. Even though Blank's playback timing solution differs from the claimed invention, Blank nevertheless has a viable playback timing solution for synchronous playback, and thus, "a [POSITA] having common sense at the time of the invention would not have reasonably looked to [Gray] to solve a problem already solved by [Blank]." *In re Rinkevich*, BPAI, 2007-1317 at 9 (Decided May 29, 2007).

Second, while Blank incorporates Gray by reference, this alone does not explain why a POSITA would have been motivated to use Gray's "frame-specific time stamps" for playback timing in a system constructed from a combination of Blank's devices. The Examiner states, "Blank teaches in a non-isosynchronous network whereas Gray teaches using their time to convert a non-isosynchronous network to an isosynchronous network," and concludes "it would be obvious…to combine Blank and Gray because the user would be able to use their system in two different types of networks thereby expanding the range of users and system (sic) that may not have been able to stream data in this manner." Answer, p. 9. But the Examiner's reasoning fails to explain why a POSITA would have been motivated to use Gray's "frame-specific time stamps" for playback timing in a system constructed from a combination of Blank's devices. Indeed, converting information from a non-isosynchronous (variable delay) network to an isosynchronous (constant delay) network as taught by Blank and Gray involves synchronizing internal clocks of network devices to a dedicated master clock -- ***not synchronizing playback of media*** by two or more media playback devices. May 16, 2018, Response, pp. 9-13 ("the

proposed combination of Blank and Gray requires that Gray's timestamping feature be used to perform a different function than taught by Blank"); December 20, 2017, Response, pp. 33-34 (same).

The Examiner has failed to "***articulate a reason why*** a PHOSITA would" use Gray's "frame-specific time stamps" for playback timing in a system constructed from a combination of Blank's devices with "a satisfactory explanation" that has "a rational connection between the facts found and the choice made." *In re Nuvasive*, 842 F.3d 1376, 1382 (Fed. Cir. 2016) (emphasis original). Because the Examiner's contentions in the Answer do not remedy the Examiner's failure to articulate a reason why a POSITA would have modified Blank with Gray in the manner proposed to arrive at the claimed invention, the Examiner has failed to establish a *prima facie* case of obviousness based on the combination of Blank and Gray.

E. The contentions in the Examiner's Answer regarding the APA fail to overcome the deficiencies of Blank, Gray, and the proffered reasons for combining and modifying Blank and Gray

The Examiner contends the APA "show[s] that the existence of playback timing is not new or inventive." Answer, p. 9. That is not true. The alleged APA never mentions playback timing, much less using playback timing for synchronous playback in the manner recited in claim 9.

The Examiner further contends the APA shows "devices in the prior art are independently clocked" based on the Examiner's interpretation of the "independently clocked" claim term. Answer, pp. 9-10. But even if devices in the

prior art may have been "independently clocked" under the Examiner's construction, that alone does not show or suggest that "the first and second playback devices remain independently clocked ***during synchronous playback of the audio information***," as recited in claim 9. The alleged APA teaches that prior art independently-clocked playback devices could <u>not</u> play audio in synchrony because they did not reliably clock at precisely the same rate. Ex. A: Wolfe Dec., ¶ 26. The inventor's recognition that independently clocked playback devices could not play audio in synchrony with each other does not render obvious the claimed solution that enables multiple playback devices to "remain independently clocked during synchronous playback." *Cardiac Pacemakers v. St. Jude Medical*, 381 F.3d 1371, 1377 (Fed. Cir. 2004) ("Recognition of a need does not render obvious the achievement that meets that need.").

Because the APA does not show or suggest "playback timing" and that multiple playback devices could "remain independently clocked during synchronous playback" as recited in claim 9, the Examiner's contentions in the Answer do not remedy the Examiner's failure to show that further modifying Blank (or Blank and Gray) with the teachings of the APA would render the claims *prima facie* obvious.

F. The Examiner's Answer confirms that the Examiner has improperly disregarded objective evidence of non-obviousness with a clear nexus to the claimed invention

Contrary to the Examiner's assertions, the evidence of competitor praise,

copying, and failure of others does have a nexus with the claimed invention.[4] And the Examiner's failure to consider[5] the objective evidence of non-obviousness is yet another clear error. *WBIP v. Kohler*, 829 F.3d 1317, 1328 (Fed. Cir. 2016) ("A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.)

First, regarding competitor praise, the statement that "Sonos has excellent synchronous playback feature" in the Kaneko Report at Ex. D: PTX 270, p. 2, has a nexus with the claimed invention because it is referring to the same synchronous playback feature recited in claim 9 of the '357 Patent. Sec. C, *supra*. The following statements all have a nexus with the claimed invention because they each refer to the Sonos synchronous playback feature that D&M ultimately copied into D&M products that were found to infringe claim 17 of the '258 Patent, which recites the same synchronous playback feature recited in claim 9 of the '357 Patent, Sec. C, *supra*: (i) Sonos's synchronous playback feature has "amazing accuracy over [an] IP network," Ex. E: PTX 146 at D+M0072389; (ii) "their synchronization is the best

[4] Patentee has not addressed the Examiner's comments regarding "commercial success" because Patentee has not cited evidence of commercial success.

[5] The Examiner complains that "the evidence was no[t] presented to the Examiner in a timely manner," Answer, p. 7, but this is incorrect. Patentee explained the reasons for the timing of the submission of the evidence in the 37 C.F.R. § 1.116 Request filed on May 16, 2018, and the Office entered the evidence into the record as shown in the Advisory Action mailed on June 11, 2018.

I've ever heard," Ex. G: PTX 193 at D+M_0158702; and (iii) "[e]ach zone can play the same music…and music playback in all 32 zones can be perfectly synchronized," "every Sonos Zone can act like bridge, a switch, a wireless repeater, a synchronized source and a synchronized player" and "it is virtually impossible to hook to it up 'wrong'," Ex. H: PTX 275 at D+M_0408322-30.

Second, the evidence of competitor copying has a nexus with the claimed invention because the evidence shows D&M was aware of, had access to, and copied Sonos products embodying the claimed synchronous playback feature described in the Kaneko Report. In particular, the evidence of copying in Ex. D: PTX 270 (the Kaneko Report), Ex. I: PTX 180 at D+M_0129410 ("Make Sonos-copy products"), and Ex. B: PTX 198 (D&M's detailed engineering plan to copy Sonos products) has a nexus with the claimed invention because the Kaneko Report shows D&M studied Sonos patent filings describing the synchronous playback feature, and D&M's engineering plan shows D&M reverse engineered actual Sonos products embodying the synchronous playback feature. Further, D&M's copying efforts resulted in a device that was found to infringe claim 17 of the '258 Patent, which recites the same synchronous playback feature recited in claim 9 of the '357 Patent. Ex. F: Verdict at p. 2; Ex. J: Jury Instructions, p. 23; Sec. C, *supra*.

Third, the evidence showing failure of others amounts to evidence of nonobviousness when it is shown that widespread efforts of skilled workers having knowledge of the prior art had failed to find a solution to the problem. *Smith &*

Nephew v. Convatec, IPR 2013-00097 (LMG), Paper 27, p. 7 (PTAB, Aug. 21, 2013) (citing *In re Allen*, 324 F.2d 993, 997 (CCPA 1963)). Here, the evidence of failure of others has a nexus with the claimed invention because the evidence shows widespread efforts by persons of ordinary skill in the art failed to develop acceptable synchronous playback solutions. Ex. H: PTX 275 at D+M 0408332 ("Sonos has been the only successful multi-zone home audio solution…Offerings from Logitech, Cisco and Yamaha have failed."); Ex. K: PTX 179 at D+M_0128194 (the PURE Jongo Wireless Audio System had "poor audio synchronization."); Ex. K: PTX 179 at D+M0128159 (The synchronous playback "made me dizzy. I wonder if the engineering team has actually calculated the phase differential? It sounds to me like it is drifting continuously back and forth.").

Because the objective evidence of non-obviousness has a nexus with the claimed invention, the Examiner's continued failure to consider the objective evidence of non-obviousness is a clear error. *WBIP*, 829 F.3d at 1328.

III. Conclusion

For the foregoing reasons, Patentee submits that the § 103 rejections should be reversed and patentability of the claims confirmed.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: January 7, 2019 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

REQUEST FOR ORAL HEARING

Patentee requests an Oral Hearing for the above-captioned matter pursuant to 37 C.F.R. § 41.47. Patentee submits herewith the fee required by 37 C.F.R. § 41.20(b)(3). Please charge any underpayment or credit any overpayment of fees in this matter to Deposit Account No. 13-2490.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: January 7, 2019 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that copies of the Reply Brief and Request for Oral Hearing filed at the U.S. Patent Office on January 7, 2019, are being served via Federal Express upon the following third-party requestor:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: January 7, 2019 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

Electronic Patent Application Fee Transmittal				
Application Number:	90013959			
Filing Date:	16-Jun-2017			
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK			
First Named Inventor/Applicant Name:	9213357			
Filer:	Jeffrey Armstrong			
Attorney Docket Number:	04-0401-REEXAM (14-1800-R			
Filed as Large Entity				
Filing Fees for ex parte reexam				
Description	**Fee Code**	**Quantity**	**Amount**	**Sub-Total in USD($)**
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
REQUEST FOR ORAL HEARING	1403	1	1300	1300
APPEAL FORWARDING FEE	1413	1	2240	2240

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**3540**

Electronic Acknowledgement Receipt	
EFS ID:	34784979
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	07-JAN-2019
Filing Date:	16-JUN-2017
Time Stamp:	19:01:43
Application Type:	Reexam (Patent Owner)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$3540
RAM confirmation Number	010819INTEFSW19023300
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	Reply Brief Filed	04-0401-REEXAM_Reply_Brief.pdf	511712 0914f269db361dd6295b29a5a8f45c154859af66	no	24
Warnings:					
Information:					
2	Request for Oral Hearing	04-0401-REEXAM_Request_for_Oral_Hearing.pdf	91332 2eb3a4c2f03ed788aeeb1a00b65bde34050b1fe8	no	1
Warnings:					
Information:					
3	Reexam Certificate of Service	04-0401-REEXAM_Certificate_of_Service.pdf	78272 026745ca4dcf418e955fc93a0fa6509aed19ebf0	no	1
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32192 8cce2c03ac8a277acef373ba127be93bb8027217	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	713508		

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 11/05/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
11/05/2018	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Application Number: 90/013,959
Filing Date: 16 Jun 2017
Appellant(s): 9213357

_____
Jeffrey P. Armstrong
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 09/17/2018.

(1) Grounds of Rejection to be Reviewed on Appeal

Every ground of rejection set forth in the Office action dated 03/16/25018 from which the appeal is taken is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION." In summary, the grounds of rejection to be reviewed on appeal, and are incorporated by reference as set forth in the Final Office Action mailed on 03/16/2018, are:

Claims 9, 10, 11, 12, and 19 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Blank in view of the Gray and in further view of Sonos APA.

(2) Response to Argument

The PO has structured the arguments in specific sections. The Examiner will address these arguments in the same structure. PO states that the Examiner has not established a *prima facie* case of obviousness for multiple reasons.

As per the A.1. arguments, starting on page 10 of the Appeal Brief, the PO states that the Examiner has failed to explain ***why*** a POSITA would have combined Blank's media synch player, time server, and control console into a single "playback device" and configure that proposed device to perform the combination of "master" playback device functions recited in the claims. PO further cites multiple cases to support their argument.

As to the **A.1. arguments**, as stated in the Final Office action, dated 03/16/2018, one of the motivations to combine the devices of Blank into one "box", which would encompass all the functionality of those devices, is what is found in MPEP 2144.04 V.B. "Making Integral"

In re Larson, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), i.e., the courts found that making one means integral with another means, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice."). In this instance, taking two computers and housing them in "one box" would be an "obvious engineering choice". Thusly, the time server 120 would then transmit clock information to a second media synch players 110, to allow it to acquire a lock with a clock contained in time server 120. See ¶ 0048 of Blank. The Examiner has stated such a rational since the first Non-Final Office Action. The Examiner utilized the analogy of different servers being placed into "one box" to show that combining different devices in the networking arts is common practice. Cellular phones also have a plurality of capabilities that were once only in separate devices. The PO states that the different servers, in that analogy, have different functionality and work independently of each other and therefore would not interfere with each other's processes. With regards to this argument, the combination of Blank's devices would still not interfere or change what each component of the "one box" would do since the components themselves are not changed, only the proximity to each other and being "housed" in one "box". Furthermore, the fact that they already work together in the system adds to the ease of combining them since they are not part of totally different systems. It is interpreted by the Examiner that this type of engineering choice would replicate what is seen in the market as a "master controller" or audio visual stereo receiver. Not only would such an obvious modification be an engineering choice, it would also yield the predictable result of the devices still communicating with each other as components in "one box" and performing their intended functions with the only difference in this system being the distance between them and being housed in "one box". The devices would also not perform any other unexpected function other than what they are

programmed to do and therefore, would not require undue experimentation to determine other different outcomes. Lastly, combining these into "one box" would shorten the distance and therefore time with the commands made between these devices, making latency very minimal and only require a user to purchase one device instead of several.

As per the A.2. arguments, starting on page 16 of the Appeal Brief, the PO states that the Examiner has failed to explain ***how*** a POSITA would have combined Blank's media synch player, time server, and control console would work. PO further states, the proposed combination would change the foundational premise by including a time server in the "first playback device" and a time server in the second playback device", rather than relying on a single dedicated time server for the entire system and the Examiner fails to explain how synchronization in Blank's system would work subsequent to this change.

As to the **A.2. arguments**, Firstly, the PO has confused how the combination of devices is carried out and which devices are combined as stated in the rejection and explanation. The Examiner has not indicated that in the rejection that the "second playback device" has a time server. As stated in the rejection, and responses to arguments, it is a "first media synch player" that would have the timer server and control console combine together. This was explicitly displayed in the Final Office Action's remarks with a figure for the PO so to better illustrate what was meant in the rejection, a copy of the figures are presented below.

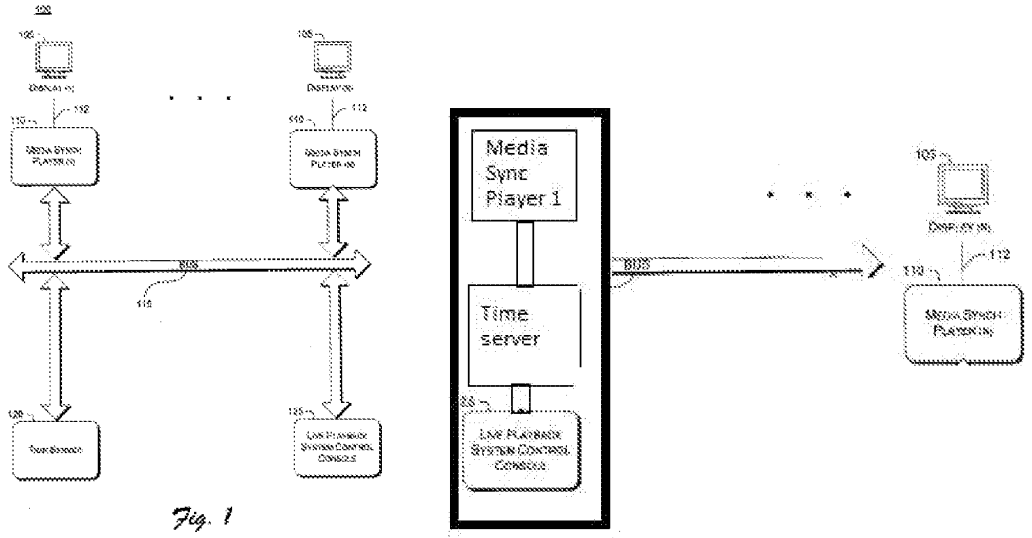


Fig. 1

The figure to the left is the original figure 1 from Blank. The figure to the right is how the combination of devices into "one box" would look like. As one can see, media sync player 1 is the only device in the system that has the additional components. It is seen that Media Sync Player (N), which would be all other sync players, do not have the same configuration as illustrated by the Examiner in media sync player 1. Therefore, PO's arguments with regards to the system not working because of multiple time server in the system are moot since that was never how the combination was illustrated. As to the timing information for the Media sync player 1 and all other sync player, the time information sent and received would be done in the same way as was previously stated in the Black reference with nothing changed except that the information would go to the combination of devices in the one "box". The time stamp for Media sync player 1 would be the same time as the time server with since the Media sync player 1 and time server are in the same "box" i.e., they are the same device with all the components of the time server and Media sync player 1. All operations would occur as is stated in Blank ¶¶ 0044 – 0045. As for the control console, the timecode card would still be "slave" to the time server that is within the same "box" and therefore nothing has change in that regard, e.g., Blank, ¶ 0024.

Therefore, the timer server and control console are not duplicated in other media players as suggested by the PO and therefore all functions cited still work as stated with the only difference being where the location is of the timer server, control console, and Media sync player 1 being in the same location of the "one box".

As per the A.3. arguments, starting on page 19 of the Appeal Brief, the PO argues that the Examiner failed to establish a reasonable expectation of success with making the proposed combination and all of which was conclusory. The PO uses the court case from which the third party requester, D&M Holdings, Inc., and Sonos were D&M Holdings, Inc. was found liable for willfully infringing Sonos's patent. PO states that D&M engineers could not figure out how to implement synchronous audio playback nearly a decade after the date of invention. PO then states that the Examiner failed to properly consider this objective evidence contradicting the Examiner's "conclusory allegations".

As to the **A.3. arguments**, it would like to be pointed out that all the case information given by the PO does not, in any way, **connect** the case mention with those patented claims to the actual **claim language in *this*** Re-exam. There is no evidence shown by the PO that connects the case to the claims and if the actual **claim language** is what was difficult to duplicate. As to the PO arguments towards the Examiner failed to properly consider this objective evidence, the evidence was no presented to the Examiner in a timely manner. This information was brought to the Examiner's attention during an Examiner's Interview, dated 05/09/2018. When discussing this evidence, the Examiner stated that all the evidence that would be important to this Re-exam would have to **clearly** link to the claim language in this Re-exam. As stated in the Advisory Action, PO did not follow what is stated in MPEP 716.03(a), "In order to be commensurate in

scope with the claims the commercial success MUST be due to claimed features, and not due to unclaimed features. An affidavit or declaration attributing commercial success to a product or process "constructed according to the disclosure and claims of [the] patent application" or other equivalent language does not establish a nexus between the claimed invention and the commercial success because there is no evidence that the product or process which has been sold corresponds to the **claimed invention**, or that whatever commercial success may have occurred is attributable to the product or process defined by the claims. Ex parte Standish, 10 USPQ2d 1454, 1458 (Bd. Pat. App. & Inter. 1988)." The description of the evidence and the evidence itself does not teach the limitations that are rejected or how D&M attempted to use the specific claim language to copy a Sonos product.

As per the A.4. arguments, starting on page 22 of the Appeal Brief, PO argues that the examiner failed to establish that it would have been *prima facie* obvious to modify Blank's devices to use features in Gray to practice the claimed invention. PO further states that, "A POSITA having common sense would not look to a second reference to solve a problem already solved by a first reference.

As to the **A.4. arguments**, the Examiner would like to point out that there are THREE versions, i.e., Construction 1, Construction 2, and APA interpretation, of the rejection when it comes to the interpretation of "playback timing" element, See Final Office Action, pp. 19 – 23. These separate interpretations of the art were written to cover the cases where the prior art may not have taught the claimed limitation and stem from the D&M Concurrent Litigation, also see claim interpretation section of the Final Office Action, pp. 12 – 14. One interpretation of the claim language states that Blank teaches the "playback timing" as "t+d", with 't' being the

clocking data from the time server and the delay time 'd' being added to 't' to create the "playback timing". It is clearly noted that the PO has stated on the record that Blank teaches this limitation and therefore agrees with the Examiner in the first version of the rejection. It is noted that Gray is utilized in other aspects to the rejections of the claim language and is still applied, but in different manners not argued. Therefore, taking the first construction of the rejection does not change the rejection to a 102. If however, the PO considered the Blank's "t+d" to be the clock information, Gray clearly teaches the playback time as claimed. Furthermore, as stated in previous action, it is clear that Gray is mentioned in Blank and incorporated by reference, see Blank ¶ 0045. In paragraph 0045, it is stated that Blank teaches in a non-isosynchronous network whereas Gray teaches using their time to convert a non-isosynchronous network to an isosynchronous network. Therefore, as previously stated, it would be obvious to one of skill in the art to combine Blank and Gray because the user would be able to use their system in two different types of networks thereby expanding the range of users and system that may not have been able to stream data in this manner.

As per the A.5. arguments, starting on page 23 of the Appeal Brief, PO argues the Examiner failed to establish that it would have been *prima facie* obvious to further modify Blank and Gray with the APA. More specifically the combination does not teach the "playback timing" or "independently clocked" elements of the claim.

As to the **A.5. arguments**, the Examiner stated above the use of Blank and Gray teaching the use of "playback timing". The utilization of APA was to clearly show that the existence of playback timing is not new or inventive, see response to arguments above A.4. As to the limitation of "independently clocked", the Examiner would like to draw attention to the Claim

Interpretation section of the Final Office Action, p. 13. As the BRI of the claims is interpreted, the term "independently clocked" can be interpreted as each clock of each device is run under that devices own power, i.e., a master device does not run the other device's clock, the master device can merely set a sync point in time and the devices then use their own power to continue running the clock. PO has not refuted this interpretation. It is seen in the APA that devices in the prior art are independently clocked, therefore known in the prior art as stated by the PO. Therefore, knowing this teaching, one can say that the combination of APA with Blank and Gray would read on the claim language, i.e., knowing that the prior art has devices that are independently clocked would allow one to assume that the devices in the prior art of Blank and Gray are independently clocked since they do not make specific mention of such a change, i.e., the devices power their own clocks as the BRI suggests. Therefore, the APA is utilized to prove that devices in the prior art are all independently clocked as suggested by the PO. Utilizing the combination of Blank and Gray would allow the system to synchronize multimedia while having the devices in the system to be powered by their own clocks, i.e., "independently clocked", as suggested in the prior art of the APA. PO states that the prior art's independently clocked playback devices could *not* play audio in synchrony because they did not reliably clock at precisely the same rate, Ex. A:P Wolfe Dec., ¶ 26. As to this argument, the prior art of Blank has foreseen this issue and utilizes a resynchronization that takes place at small intervals, Blank ¶ 0049 – 0051. It is also noted that the claim does not state **how** the devices in the claim stay independently clocked, only that they are, i.e., there is no algorithm in the claim language that teaches how the devices play in synchronicity, only that they do. This is the same as how the prior art reads on the claim language.

As per the B., B.1., B.2., and B.3. arguments, starting on page 24 of the Appeal Brief, PO argues the Examiner's dismissal is legally erroneous for at least two reasons. First, the Examiner improperly conflated commercial success with competitor praise, competitor copying, and competitor failures when dismissing the objective evidence of non-obviousness on grounds that the Patentee did not "establish a nexus between the claimed invention and the commercial success". This argument is stated in section B. and elaborated in section B.1.

Second, the Examiner applied an incorrect legal standard for evidence of copying when concluding that the evidence fails to show "how D&M attempted to use the specific claim language to copy a Sonos product. This argument is stated in section B. and elaborated in section B.2.

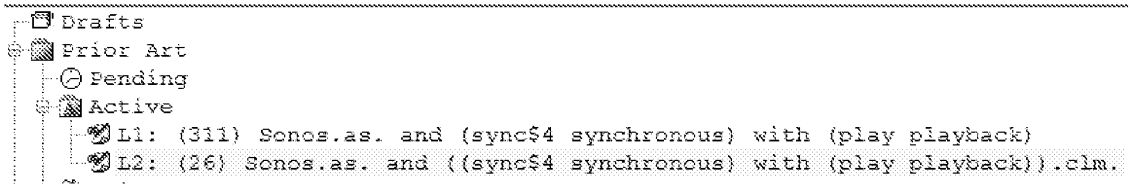
Third, PO states that the competitors struggled and failed to implement synchronous playback functionality.

As to **B. - B.3. arguments**, the PO still does not state what specific claimed feature from the Litigation in the D&M case was considered novel enough for praise other than "Sonos has excellent synchronous playback feature". The PO's statement of the distinguishing claimed feature being the "synchronous playback" is extremely broad concept, i.e., the genus, and does not explain what specific feature in the claim that accomplishes the Synchronous playback that sets Sonos above the competition as the PO suggests. There is no explanation as to the inner workings of the invention as it relates to the claim language that makes the Sonos playback so "perfectly synchronized". The Examiner has requested this information to aid in determining patentability and the PO does not supply AND map how the evidence is connected to the claim language and is important to this Re-exam. As stated in the MPEP 716.03(b),

- In considering evidence of commercial success, care should be taken to determine that the commercial success alleged is **directly derived from the invention claimed**... *In re Mageli*, 470 F.2d 1380, 176 USPQ 305 (CCPA 1973) (conclusory statements or opinions that increased sales were due to the merits of the invention are entitled to little weight); *In re Noznick*, 478 F.2d 1260, 178 USPQ 43 (CCPA 1973).
- **Merely showing** that there was commercial success of an article which embodied the invention is **not sufficient**. *Ex parte Remark*, 15 USPQ2d 1498, 1502-02 (Bd. Pat. App. & Inter. 1990). Compare *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir. 1988)
- To be pertinent to the issue of nonobviousness, **the commercial success of devices falling within the claims of the patent must flow from the functions and advantages disclosed or inherent in the description in the specification**. Furthermore, the success of an embodiment within the claims may not be attributable to improvements or modifications made by others. *In re Vamco Machine & Tool, Inc.*, 752 F.2d 1564, 224 USPQ 617 (Fed. Cir. 1985). See also *Merck & Cie v. Gnosis S.P.A.*, 808 F.3d 829, 833, 117 USPQ2d 1393, 1399 (Fed Cir. 2015), *cert. denied*, 137 S. Ct. 297 (2016) (commercial success resulted from a "unique combination" of ingredients, a synergistic interaction of components, or a specific combination of specific forms of B-vitamins and other active ingredients, rather than from the claimed method of "using L-5-MTHF and 'at least one B-vitamin'").

There is no statement from the PO, as requested by the Examiner, as to the specific functions of the claims that resulted in success or the ability to have devices "perfectly synchronized". Furthermore, with a quick search into the USPTO's patent search engine, the prior art of Sonos it is seen that three hundred and eleven patents have the technology and specific language of synchronous playback, with twenty six of them being specifically mentioned in the claims, as of

the updated search 10/25/2018. It is still unclear if the praise mention by D&M are actually found in the other claims stated in these patents.



When viewing the evidence listed by the PO, it is seen in Exhibit F that the patents of Sonos, 9,195,258, 7471,014, and 8,588,949 were a part of case 1:14-cv-01330-WBC. When viewing the claims in the case, it is seen that Patents 7471,014, and 8,588,949 do not claim the same invention as claimed in the 9,213,357, the case under Reexam. Claim 17 of Patent 9,195,258, which was the specific claim under review in the case, claims some similar features found in the 9,213,357 patent ***but*** also claims multiple other features not found in the claims under re-exam. The other evidence also does not suggest or teach claim language in this re-exam that would lead to "perfect" synchronous playback.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/DAVID E ENGLAND/
Primary Examiner, Art Unit 3992

Conferees:

/Roland Foster/, Primary Examiner, Art Unit 3992

/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992

Requirement to pay appeal forwarding fee. In order to avoid dismissal of the instant appeal in any application or ex parte reexamination proceeding, 37 CFR 41.45 requires payment of an

appeal forwarding fee within the time permitted by 37 CFR 41.45(a), unless appellant had timely paid the fee for filing a brief required by 37 CFR 41.20(b) in effect on March 18, 2013.

Reexamination	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90/013,959	9213357
	Certificate Date	Certificate Number

Requester Correspondence Address: ☐ Patent Owner ☑ Third Party
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	26 October 2018 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., 1:16cv00141 (CLOSED)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	NUMBER

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	311	Sonos.as. and (sync$4 synchronous) with (play playback)	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2018/10/26 11:56
L2	26	Sonos.as. and ((sync$4 synchronous) with (play playback)).clm.	US-PGPUB; USPAT; EPO; DERWENT	OR	ON	2018/10/26 11:56

10/ 26/ 2018 11:56:41 AM
C:\ Users\ dengland\ Documents\ EAST\ Workspaces\ 90013959.wsp

LINKPLAY EXHIBIT 1004
Page 113 of 4822

Litigation Search Report CRU 3999

Reexam Control No. 90/013,959

TO: David England
Location: CRU
Art Unit: 3992
Date: October 18, 2018

U.S. Patent Number: 9,213,357

From: Patricia Martin
Paralegal Specialist
Location: CRU 3999
Phone: (571) 272-7705

Search Notes

1) I performed a search on the patent in Lexis Court Link for any open dockets or closed cases.

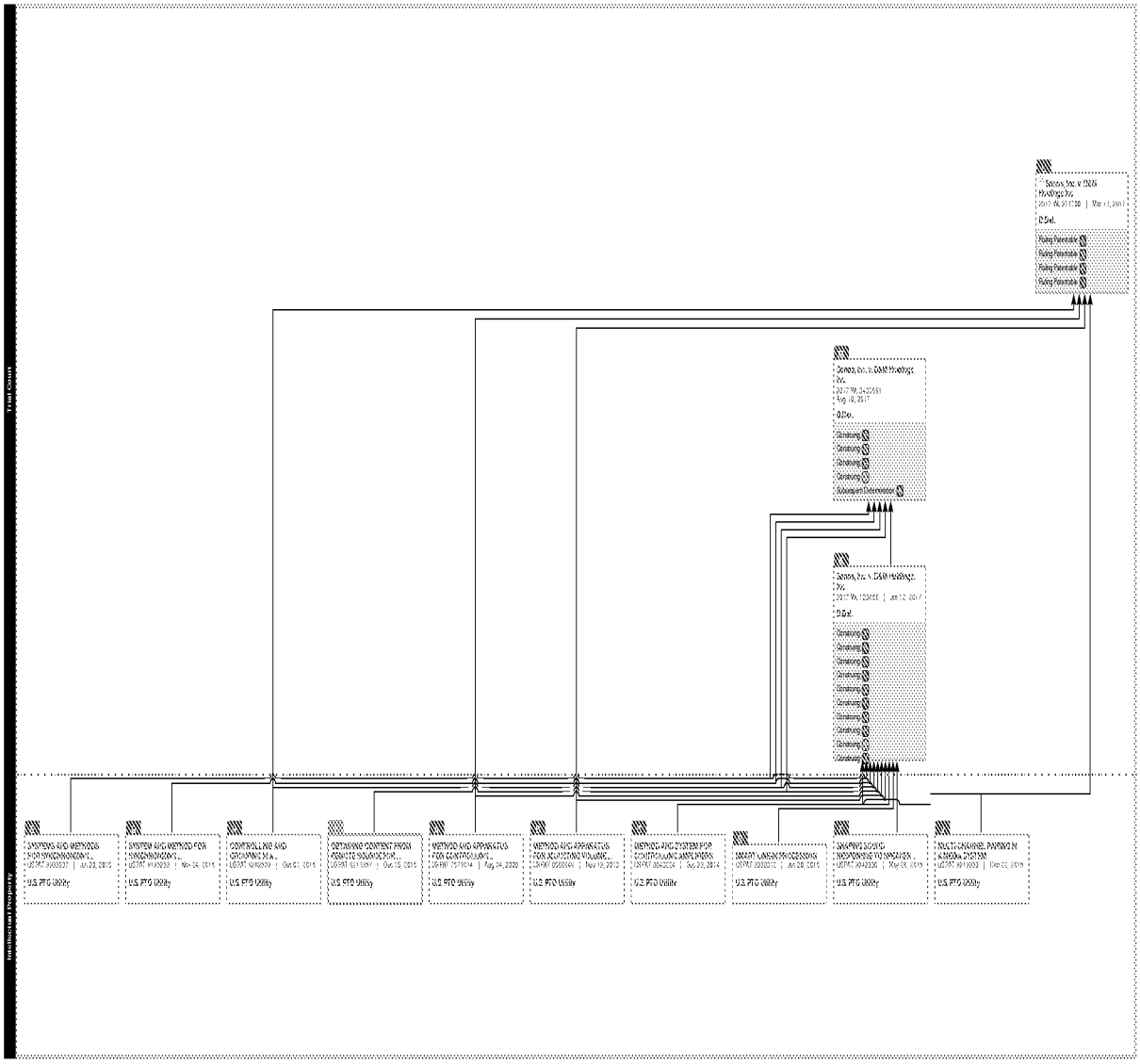
2) I performed a Key Cite Search in Westlaw, which retrieves all history on the patent including any litigation.

3) I performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.

4) I performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.

5) I performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

Litigation was found involving:


Trial Court
Intellectual Property

History (54)

Direct History (45)

1. METHOD AND APPARATUS FOR CONTROLLING MULTIMEDIA PLAYERS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 7571014 , U.S. PTO Utility , Aug. 04, 2009

Construed by

2. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

3. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

4. METHOD AND APPARATUS FOR CONTROLLING MULTIMEDIA PLAYERS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 7571014 , U.S. PTO Utility , Aug. 04, 2009

Ruled Patentable by

5. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

---

6. METHOD AND APPARATUS FOR ADJUSTING VOLUME LEVELS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 8588949 , U.S. PTO Utility , Nov. 19, 2013

Construed by

7. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Subsequent Determination

8. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

9. METHOD AND APPARATUS FOR ADJUSTING VOLUME LEVELS IN A MULTI-ZONE SYSTEM Cited Ref
US PAT 8588949 , U.S. PTO Utility , Nov. 19, 2013

Ruled Patentable by

10. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

---

11. METHOD AND SYSTEM FOR CONTROLLING AMPLIFIERS Cited Ref
US PAT 8843224 , U.S. PTO Utility , Sep. 23, 2014

Construed by

12. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

13. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

14. SMART LINE-IN PROCESSING Cited Ref
US PAT 8938312 , U.S. PTO Utility , Jan. 20, 2015

Construed by

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

15. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

16. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

17. SYSTEMS AND METHODS FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES WITHOUT A VOLTAGE CONTROLLED CRYSTAL OSCILLATOR Out of Plan
US PAT 8938637 , U.S. PTO Utility , Jan. 20, 2015

Construed by

18. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

19. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

20. SYSTEMS AND METHODS FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES WITHOUT A VOLTAGE CONTROLLED CRYSTAL OSCILLATOR Out of Plan
US PAT 8938637 , U.S. PTO Utility , Jan. 20, 2015

Construed by

21. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

22. SHAPING SOUND RESPONSIVE TO SPEAKER ORIENTATION Out Of Plan
US PAT 9042556 , U.S. PTO Utility , May 26, 2015

Construed by

23. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

24. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

25. SYSTEM AND METHOD FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES Out Of Plan
US PAT 9195258 , U.S. PTO Utility , Nov. 24, 2015

Construed by

26. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

27. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

28. SYSTEM AND METHOD FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES Out Of Plan
US PAT 9195258 , U.S. PTO Utility , Nov. 24, 2015

Construed by

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

29. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

30. CONTROLLING AND GROUPING IN A MULTI-ZONE MEDIA SYSTEM Ov. Of Pat.
US PAT 9202509 , U.S. PTO Utility , Dec. 01, 2015

Construed by

31. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

32. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

33. CONTROLLING AND GROUPING IN A MULTI-ZONE MEDIA SYSTEM Ov. Of Pat.
US PAT 9202509 , U.S. PTO Utility , Dec. 01, 2015

Ruled Patentable by

34. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

AND Construed by

35. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

36. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK Ov. Of Pat.
US PAT 9213357 , U.S. PTO Utility , Dec. 15, 2015

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Construed by

37. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

38. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

39. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
US PAT 9213357 , U.S. PTO Utility , Dec. 15, 2015

Construed by

40. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

41. MULTI-CHANNEL PAIRING IN A MEDIA SYSTEM
US PAT 9219959 , U.S. PTO Utility , Dec. 22, 2015

Construed by

42. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

43. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

44. MULTI-CHANNEL PAIRING IN A MEDIA SYSTEM
US PAT 9219959 , U.S. PTO Utility , Dec. 22, 2015

Ruled Patentable by

45. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

Related References (9)

46. Sonos, Inc. v. D & M Holdings Inc.
2015 WL 5277194 , D.Del. , Sep. 09, 2015

47. Sonos, Inc. v. D&M Holdings Inc.
2016 WL 4249493 , D.Del. , Aug. 10, 2016

Report and Recommendation Adopted by

48. Sonos Inc. v. D&M Holdings Inc.
2016 WL 4581078 , D.Del. , Sep. 01, 2016

49. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 476279 , D.Del. , Feb. 03, 2017

50. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 3669514 , D.Del. , Aug. 24, 2017

51. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 4969330 , D.Del. , Nov. 01, 2017

52. Sonos, Inc. v. D & M Holdings Inc.
297 F.Supp.3d 501 , D.Del. , Nov. 01, 2017

53. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 5633204 , D.Del. , Nov. 21, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

54. Sonos, Inc. v. D & M Holdings Inc.
287 F.Supp.3d 533 , D.Del. , Dec. 07, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

US District Court Civil Docket

U.S. District - Delaware
(Wilmington)

1:16cv141

D&M Holdings, Inc., et Al. v. Sonos, Inc.

This case was retrieved from the court on Thursday, October 18, 2018

Date Filed:	03/07/2016		
Assigned To:	Judge Richard G. Andrews	Class Code:	CLOSED
Referred To:		Closed:	05/21/2018
Nature of suit:	Patent (830)	Statute:	35:0145
Cause:		Jury Demand:	Plaintiff
Lead Docket:	None	Demand Amount:	$0
Other Docket:	1:14cv01330	NOS Description:	Patent
Jurisdiction:	Federal Question		

Litigants	Attorneys
D&M Holdings Inc. d/b/a The D&M Group Plaintiff	Jack B. Blumenfeld LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200 Email:Jbbefiling@mnat.Com Michael J. Flynn LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email:Mflynn@mnat.Com Blake T. Dietrich PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Bdietrich@jw.Com Christopher J. Rourk PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Crourk@jw.Com

LINKPLAY EXHIBIT 1004
Page 124 of 4822

	John M. Jackson PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Jjackson@jw.Com Matthew C. Acosta PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Macosta@jw.Com Wasif Qureshi PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Wqureshi@jw.Com
D&M Holdings U.S. Inc. Plaintiff	Jack B. Blumenfeld LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200 Email:Jbbefiling@mnat.Com Michael J. Flynn LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email:Mflynn@mnat.Com Christopher J. Rourk PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Crourk@jw.Com Wasif Qureshi PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Wqureshi@jw.Com
Sonos Inc. Defendant	Philip A. Rovner LEAD ATTORNEY;ATTORNEY TO BE NOTICED Potter Anderson & Corroon, LLP 1313 N. Market St., Hercules Plaza, 6th Flr. P.O. Box 951 Wilmington , DE 19899-0951 USA (302) 984-6000 Email:Provner@potteranderson.Com Cole B. Richter PRO HAC VICE;ATTORNEY TO BE NOTICED

LINKPLAY EXHIBIT 1004
Page 125 of 4822

Email: Richter@ls3ip.Com

George I. Lee
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Lee@ls3ip.Com

Jae Y. Pak
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Pak@ls3ip.Com

John D. Smith , III
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Smith@ls3ip.Com

Michael P. Boyea
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Boyea@ls3ip.Com

Rory P. Shea
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Shea@ls3ip.Com

Sean M. Sullivan
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Sullivan@ls3ip.Com

Sonos Inc.
Counter Claimant

Philip A. Rovner
LEAD ATTORNEY; ATTORNEY TO BE NOTICED
Potter Anderson & Corroon, LLP
1313 N. Market St., Hercules Plaza, 6th Flr.
P.O. Box 951
Wilmington , DE 19899-0951
USA
(302) 984-6000
Email: Provner@potteranderson.Com

George I. Lee
ATTORNEY TO BE NOTICED

Email: Lee@ls3ip.Com

John D. Smith , III
ATTORNEY TO BE NOTICED

Email: Smith@ls3ip.Com

Michael P. Boyea
ATTORNEY TO BE NOTICED

Email: Boyea@ls3ip.Com

Rory P. Shea
ATTORNEY TO BE NOTICED

Email: Shea@ls3ip.Com

LINKPLAY EXHIBIT 1004
Page 126 of 4822

	Sean M. Sullivan ATTORNEY TO BE NOTICED Email:Sullivan@ls3ip.Com
D&M Holdings Inc. d/b/a The D&M Group Counter Defendant	Jack B. Blumenfeld LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200 Email:Jbbefiling@mnat.Com Michael J. Flynn LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email:Mflynn@mnat.Com Blake T. Dietrich ATTORNEY TO BE NOTICED Email:Bdietrich@jw.Com Christopher J. Rourk ATTORNEY TO BE NOTICED Email:Crourk@jw.Com John M. Jackson ATTORNEY TO BE NOTICED Email:Jjackson@jw.Com Matthew C. Acosta ATTORNEY TO BE NOTICED Email:Macosta@jw.Com Wasif Qureshi ATTORNEY TO BE NOTICED Email:Wqureshi@jw.Com
D&M Holdings U.S. Inc. Counter Defendant	Jack B. Blumenfeld LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200

LINKPLAY EXHIBIT 1004
Page 127 of 4822

Email:Jbbefiling@mnat.Com

Michael J. Flynn
LEAD ATTORNEY;ATTORNEY TO BE NOTICED
Morris, Nichols, Arsht & Tunnell LLP
1201 North Market Street
P.O. Box 1347
Wilmington , DE 19899
USA
302-351-9661
Fax: 302-498-6217
Email:Mflynn@mnat.Com

Christopher J. Rourk
ATTORNEY TO BE NOTICED

Email:Crourk@jw.Com

Wasif Qureshi
ATTORNEY TO BE NOTICED

Email:Wqureshi@jw.Com

Date	#	Proceeding Text	Source
03/07/2016	1	[SEALED] COUNTERCLAIMS for Patent Infringement against Sonos Inc.- filed by D&M Holdings U.S. Inc., D&M Holdings Inc.. (Attachments: # 1 Exhibits A-I, # 2 Exhibit J - part 1, # 3 Exhibit J - part 2)(nms) (Entered: 03/07/2016)	
03/07/2016	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (nms) (Entered: 03/07/2016)	
03/08/2016	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) 7,343,435 B2; 6,539,210 B1; 7,305,694 B2; 6,469,633 B1; 8,755,667 B2; 6,473,441 B1, 7,734,850 B2; 7,995,899 B2, 7,987,294 B2 . (Flynn, Michael) (Entered: 03/08/2016)	
03/14/2016	4	PROPOSED Scheduling Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Letter)(Flynn, Michael) Modified on 3/15/2016 (nms). (Entered: 03/14/2016)	
03/14/2016	5	STIPULATION TO EXTEND TIME for Defendant Sonos, Inc. to answer, move or otherwise respond to Plaintiffs' Counterclaims to April 4, 2016 - filed by Sonos Inc.. (Rovner, Philip) (Entered: 03/14/2016)	
03/15/2016	6	MOTION for Pro Hac Vice Appearance of Attorney George I. Lee, Sean M. Sullivan, Rory P. Shea, John Dan Smith III and Michael P. Boyea - filed by Sonos Inc.. (Rovner, Philip) (Entered: 03/15/2016)	
03/15/2016		SO ORDERED, re 6 MOTION for Pro Hac Vice Appearance of Attorney George I. Lee, Sean M. Sullivan, Rory P. Shea, John Dan Smith III and Michael P. Boyea filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 3/15/2016. (nms) (Entered: 03/15/2016)	
03/16/2016		SO ORDERED, re 5 STIPULATION TO EXTEND TIME for Defendant Sonos, Inc. to answer, move or otherwise respond to Counterclaims to April 4, 2016, filed by Sonos Inc. (Reset Answer Deadlines: Sonos Inc. answer due 4/4/2016). Signed by Judge Richard G. Andrews on 3/16/2016. (nms) (Entered: 03/16/2016)	
03/17/2016	7	Order Setting Rule 16(b) Conference: A Scheduling Conference is set for 4/5/2016, at 11:00 AM in Chambers before Judge Richard G. Andrews (see Order for further details). Signed by Judge Richard G. Andrews on	

LINKPLAY EXHIBIT 1004
Page 128 of 4822

		3/17/2016. (nms) (Main Document 7 replaced on 3/18/2016) (nms). (Entered: 03/17/2016)
03/18/2016		CORRECTING ENTRY: The pdf for D.I. 7 has been replaced with a corrected version. The day of the week has been corrected to reflect April 5, 2016, is a Tuesday. (nms) (Entered: 03/18/2016)
03/18/2016	8	MOTION for Pro Hac Vice Appearance of Attorney John M. Jackson, Matt C. Acosta and Blake T. Dietrich - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 03/18/2016)
03/18/2016		SO ORDERED, re 8 MOTION for Pro Hac Vice Appearance of Attorney John M. Jackson, Matt C. Acosta and Blake T. Dietrich filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 3/18/2016. (nms) (Entered: 03/18/2016)
03/18/2016		Pro Hac Vice Attorney Michael P. Boyea, John D. Smith, III, Rory P. Shea, Sean M. Sullivan, George I. Lee for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (klc) (Entered: 03/18/2016)
04/04/2016	9	MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims - filed by Sonos Inc.. (Rovner, Philip) Modified on 4/4/2016 (nms). (Entered: 04/04/2016)
04/04/2016	10	[SEALED] OPENING BRIEF in Support re 9 MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 4/21/2016. (Attachments: # 1 Exhibits 1-2)(Rovner, Philip) Modified on 4/4/2016 (nms). (Entered: 04/04/2016)
04/05/2016		Minute Entry for proceedings held before Judge Richard G. Andrews - Scheduling Conference held on 4/5/2016. Counsel for Plaintiff to submit a revised Order with agreed upon dates within a week. Appearances: Jackson, Flynn for Plaintiff; Rovner, Lee, Shea for Defendant. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 04/05/2016)
04/11/2016	11	REDACTED VERSION of 10 Opening Brief in Support, by Sonos Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2)(Rovner, Philip) Modified on 4/11/2016 (nms). (Entered: 04/11/2016)
04/12/2016	12	PROPOSED Scheduling Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Letter)(Flynn, Michael) Modified on 4/12/2016 (nms). (Entered: 04/12/2016)
04/12/2016	13	SCHEDULING ORDER: Case referred to the Magistrate Judge for the purpose of exploring ADR. Joinder of Parties due by 10/21/2016. Amended Pleadings due by 10/21/2016. Discovery due by 6/9/2017. Dispositive Motions due by 9/29/2017. Answering Brief due 10/27/2017. Reply Brief due 11/17/2017. Joint Claim Construction Brief due by 4/6/2017. A Markman Hearing is set for 4/27/2017, at 8:30 AM in Courtroom 6A before Judge Richard G. Andrews. A Pretrial Conference is set for 2/23/2018, at 8:30 AM in Courtroom 6A before Judge Richard G. Andrews. A 5-day Jury Trial is set for 3/5/2018, at 9:30 AM in Courtroom 6A before Judge Richard G. Andrews (see Order for further details). Signed by Judge Richard G. Andrews on 4/12/2016. (nms) (Entered: 04/12/2016)
04/12/2016		CASE REFERRED to Chief Magistrate Judge Thynge for Mediation. Please see Standing Order dated January 20, 2016, regarding disclosure of confidential ADR communications. A link to the standing order is provided here for your convenience at http://www.ded.uscourts.gov/general-orders/magistrate-judges-standing-order-adr- mediation (cak) (Entered: 04/12/2016)
04/12/2016	14	ORDER Setting Teleconference: Plaintiffs' counsel to initiate the call. A Telephone Conference is set for 4/21/2016 at 11:00 AM Eastern Time

LINKPLAY EXHIBIT 1004
Page 129 of 4822

		before Judge Mary Pat Thynge to discuss ADR. Signed by Judge Mary Pat Thynge on 4/12/16. (cak) (Entered: 04/12/2016)
04/18/2016	15	ORAL ORDER re 14 Order Setting Teleconference: At the request of counsel, the teleconference set for 4/21/16 at 11:00 AM with Judge Thynge is cancelled. Ordered by Judge Mary Pat Thynge on 4/18/16. (cak) (Entered: 04/18/2016)
04/18/2016	16	ORDER Setting Mediation Conferences: A Telephone Conference is set for 8/11/2016 at 9:30 AM before Judge Mary Pat Thynge to be initiated by defense counsel. The Mediation Conference is set for 8/31/2016 at 10:00 AM in Courtroom 2B before Judge Mary Pat Thynge. SEE ORDER FOR DETAILS. Signed by Judge Mary Pat Thynge on 4/18/16. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(cak) (Entered: 04/18/2016)
04/21/2016	17	ANSWERING BRIEF in Opposition re 9 MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 5/2/2016. (Flynn, Michael) (Entered: 04/21/2016)
04/21/2016	18	DECLARATION of John M. Jackson re 17 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits A-B)(Flynn, Michael) Modified on 4/22/2016 (nms). (Entered: 04/21/2016)
05/02/2016	19	REPLY BRIEF re 9 MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims filed by Sonos Inc.. (Attachments: # 1 Exhibit 3-6)(Rovner, Philip) (Entered: 05/02/2016)
05/03/2016		Pro Hac Vice Attorney John M. Jackson,Blake T. Dietrich, Matthew C. Acosta for D&M Holdings Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (klc) (Entered: 05/03/2016)
05/09/2016	20	REQUEST for Oral Argument by Sonos Inc. re 9 MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims. (Rovner, Philip) (Entered: 05/09/2016)
05/11/2016	21	Letter to The Honorable Richard G. Andrews from Michael Flynn regarding Request for Oral Argument. (Flynn, Michael) Modified on 5/11/2016 (nms). (Entered: 05/11/2016)
05/12/2016	22	Letter to The Honorable Richard G. Andrews from Philip A. Rovner regarding D&M's Request for Oral Argument. (Rovner, Philip) Modified on 5/12/2016 (nms). (Entered: 05/12/2016)
05/17/2016	23	NOTICE OF SERVICE of (1) Plaintiffs' Initial Disclosures Pursuant to Section 3(b) of The Scheduling Order and (2) Plaintiffs' Initial Disclosures filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 05/17/2016)
05/17/2016	24	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Initial Disclosures Pursuant to Rule 26(a)(1) of the Federal Rules of Civil Procedure and Section 3 of the District of Delaware's Default Standard for Discovery filed by Sonos Inc..(Rovner, Philip) (Entered: 05/17/2016)
06/20/2016	25	NOTICE OF SERVICE of (1) Plaintiffs' First Set of Requests for Production of Documents to Defendant; and (2) Plaintiffs' First Set of Interrogatories to Defendant filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Blumenfeld, Jack) (Entered: 06/20/2016)
07/03/2016	26	Official Transcript of Scheduling Conference held on 04-05-16 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 7/25/2016. Redacted Transcript Deadline set for

LINKPLAY EXHIBIT 1004
Page 130 of 4822

		8/3/2016. Release of Transcript Restriction set for 10/3/2016. (lad) (Entered: 07/03/2016)
07/15/2016	27	NOTICE OF SERVICE of Sonos, Inc.'s Core Technical Documents Pursuant to Paragraph 3(c) of the Scheduling Order filed by Sonos Inc..(Rovner, Philip) (Entered: 07/15/2016)
07/20/2016	28	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Responses to Plaintiffs' First Set of Interrogatories (Nos. 1-11) [Highly Confidential - Attorneys' Eyes Only] and Defendant Sonos, Inc.'s Objections and Responses to Plaintiffs' First Set of Requests for Production of Documents filed by Sonos Inc..(Rovner, Philip) (Entered: 07/20/2016)
08/19/2016	29	NOTICE OF SERVICE of Plaintiffs' Initial Claim Charts filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 08/19/2016)
09/27/2016	30	STIPULATION TO EXTEND TIME for Defendant Sonos, Inc. to serve its invalidity contentions to November 11, 2016 - filed by Sonos Inc.. (Rovner, Philip) (Entered: 09/27/2016)
09/28/2016		SO ORDERED, Granting 30 STIPULATION TO EXTEND TIME for Defendant Sonos, Inc. to serve its invalidity contentions to November 11, 2016, filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 9/28/2016. (nms) (Entered: 09/28/2016)
10/03/2016	31	ORAL ORDER: The Court will hear oral argument on the MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims (D.I. 9) on 11/14/2016, at 10:30 AM in Courtroom 6A before Judge Richard G. Andrews. Ordered by Judge Richard G. Andrews on 10/3/2016. (nms) (Entered: 10/03/2016)
10/04/2016	32	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Amended Responses to Plaintiffs' First Set of Interrogatories (Nos. 1-11) [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 10/04/2016)
10/05/2016	33	NOTICE OF SERVICE of Defendant Sonos, Inc.'s First Set of Requests for the Production of Documents and Things to Plaintiffs filed by Sonos Inc.. (Rovner, Philip) (Entered: 10/05/2016)
10/21/2016	34	NOTICE OF SERVICE of Defendant Sonos, Inc.'s First Set of Interrogatories to Plaintiffs filed by Sonos Inc..(Rovner, Philip) (Entered: 10/21/2016)
10/24/2016	35	ORAL ORDER: The parties have advised that a discovery dispute has arisen requiring judicial attention. The Court will hold a thirty minute Discovery Conference on 11/15/2016, at 1:30 PM in Chambers before Judge Richard G. Andrews, to take up this issue. In preparation for this conference the parties shall follow the Discovery Matters and Disputes procedure as set forth in the Scheduling Order. Ordered by Judge Richard G. Andrews on 10/24/2016. (nms) (Entered: 10/24/2016)
11/04/2016	36	NOTICE OF SERVICE of Plaintiffs' Objections and Responses to Defendant Sonos, Inc.'s First Set of Requests for Production of Documents and Things filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 11/04/2016)
11/10/2016	37	STIPULATION and Order Regarding Discovery by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC, D&M Holdings Inc.. (Flynn, Michael) (Entered: 11/10/2016)
11/10/2016	38	ORDER: Per the parties request, and advisement of a stipulation regarding discovery being filed (D.I. 37), the discovery conference scheduled for 11/15/2016, is CANCELED. Ordered by Judge Richard G. Andrews on 11/10/2016. (nms) (Entered: 11/10/2016)
11/14/2016	39	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Initial Invalidity Contentions filed by Sonos Inc..(Rovner, Philip) (Entered: 11/14/2016)

LINKPLAY EXHIBIT 1004
Page 131 of 4822

11/14/2016		Minute Entry for proceedings held before Judge Richard G. Andrews - Oral Argument held on 11/14/2016. Appearances: M. Flynn, M. Acosta, J. Jackson for Plaintiff; G. Lee, R. Shea, M. Boyea, P. Rovner for Defendants. (Court Reporter Valerie Gunning.) (ksr,) (Entered: 11/14/2016)
11/14/2016	40	SO ORDERED Granting (193 in 14-cv-1330-RGA, 37 in 16-cv-141-RGA) Stipulation and Order Regarding Discovery. Signed by Judge Richard G. Andrews on 11/14/2016. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 11/14/2016)
11/28/2016	41	Official Transcript of oral argument held on November 14, 2016 before Judge Andrews. Court Reporter/Transcriber Valerie Gunning,Telephone number (302) 573-6194. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 12/19/2016. Redacted Transcript Deadline set for 12/29/2016. Release of Transcript Restriction set for 2/27/2017. (vjg) (Entered: 11/28/2016)
12/08/2016	42	Joint STIPULATION to amend scheduling order by Sonos Inc.. (Rovner, Philip) (Entered: 12/08/2016)
12/09/2016	43	SO ORDERED Granting 42 Joint Stipulation to Amend Scheduling Order (* Reset Deadlines/Hearings: Joint Claim Construction Brief due by 5/31/2017, A Markman Hearing is now rescheduled for 6/21/2017, at 9:00 AM in Courtroom 6A). Signed by Judge Richard G. Andrews on 12/9/2016. (nms) (Entered: 12/09/2016)
12/12/2016	44	PROPOSED Protective Order, by Sonos Inc.. (Rovner, Philip) Modified on 12/13/2016 (nms). (Entered: 12/12/2016)
12/13/2016	45	SO ORDERED Granting 44 Proposed Stipulated Protective Order. Signed by Judge Richard G. Andrews on 12/13/2016. (nms) (Entered: 12/13/2016)
02/01/2017	46	Joint STIPULATION regarding Supplemental Briefing on Motions by Sonos Inc.. (Rovner, Philip) (Entered: 02/01/2017)
02/02/2017	47	ORDER Denying (224 in 14-cv-1330-RGA, 46 in 16-cv-141-RGA) Joint Stipulation. Signed by Judge Richard G. Andrews on 2/2/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 02/02/2017)
02/13/2017	48	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Preliminary Election of Prior Art filed by Sonos Inc..(Rovner, Philip) (Entered: 02/13/2017)
02/24/2017	49	Joint Claim Construction Chart, Volume 1 of 2, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibits A-D)(Flynn, Michael) Modified on 2/27/2017 (nms). (Entered: 02/24/2017)
02/24/2017	50	Joint Claim Construction Chart, Volume 2 of 2, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits E-I) (Flynn, Michael) Modified on 2/27/2017 (nms). (Entered: 02/24/2017)
03/06/2017	51	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Sound United, LLC for D&M Holdings U.S. Inc.; Corporate Parent DEI Sales, Inc. for D&M Holdings Inc. filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 03/06/2017)
03/08/2017	52	NOTICE OF SERVICE of Plaintiffs' Second Set of Interrogatories to Defendant filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 03/08/2017)
03/24/2017	53	NOTICE to Take Deposition of Defendant Sonos, Inc. on April 27, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 03/24/2017)
03/27/2017	54	NOTICE OF SERVICE of Plaintiffs' Opening Claim Construction Brief filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 03/27/2017)

LINKPLAY EXHIBIT 1004
Page 132 of 4822

03/30/2017	55	NOTICE OF SERVICE of Plaintiffs' Second Set of Requests for Production of Documents to Defendant filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 03/30/2017)
04/07/2017	56	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Responses to Plaintiffs' Second Set of Interrogatories [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 04/07/2017)
04/17/2017	57	NOTICE OF SERVICE of Plaintiffs' Third Set of Interrogatories to Defendant filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 04/17/2017)
04/18/2017	58	MEMORANDUM OPINION regarding MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims (D.I. 9). Signed by Judge Richard G. Andrews on 4/18/2017. (nms) (Entered: 04/18/2017)
04/18/2017	59	ORDER Granting and Denying MOTION to Dismiss First, Second, Third, Fourth, Fifth, Seventh, and Eighth Counterclaims (D.I. 9). Signed by Judge Richard G. Andrews on 4/18/2017. (nms) (Entered: 04/18/2017)
04/19/2017	60	ORAL ORDER: The parties have advised that a dispute has arisen requiring judicial attention. The Court will hold a discovery conference on 5/18/2017, at 9:00 AM in Chambers before Judge Richard G. Andrews to take up this issue. In preparation for this hearing the parties shall follow the Discovery Matters and Disputes procedure as set forth in the Scheduling Order. Ordered by Judge Richard G. Andrews on 4/19/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 04/19/2017)
04/26/2017	61	MOTION for Pro Hac Vice Appearance of Attorney Christopher J. Rourk of Jackson Walker, LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 04/26/2017)
04/26/2017	62	MOTION for Pro Hac Vice Appearance of Attorney Wasif Qureshi of Jackson Walker LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 04/26/2017)
04/27/2017		SO ORDERED, re 62 MOTION for Pro Hac Vice Appearance of Attorney Wasif Qureshi of Jackson Walker LLP, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., 61 MOTION for Pro Hac Vice Appearance of Attorney Christopher J. Rourk of Jackson Walker, LLP, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 4/27/2017. (nms) (Entered: 04/27/2017)
04/27/2017		Pro Hac Vice Attorney Christopher J. Rourk for D&M Holdings Inc.,Christopher J. Rourk for D&M Holdings U.S. Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (crb) (Entered: 04/27/2017)
04/27/2017		Pro Hac Vice Attorney Wasif Qureshi for D&M Holdings Inc. and D&M Holdings U.S. Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (ceg) (Entered: 04/27/2017)
04/27/2017	63	Joint STIPULATION to Amend the Scheduling Order, by Sonos Inc.. (Rovner, Philip) Modified on 5/1/2017 (nms). (Entered: 04/27/2017)
04/28/2017	64	SO ORDERED, re 63 Stipulation to Amend Scheduling Order (* Reset Deadlines: Discovery due by 7/7/2017, Dispositive Motions due by 10/18/2017) (see Stipulation for further details). Signed by Judge Richard G. Andrews on 4/28/2017. (nms) (Entered: 05/01/2017)
05/01/2017	65	AMENDED COMPLAINT for Patent Infringement against Sonos Inc.- filed by D&M Holdings U.S. Inc., D&M Holdings Inc..(Flynn, Michael) Modified on 5/1/2017 (nms). Modified on 5/2/2017 (nms). (Entered: 05/01/2017)

LINKPLAY EXHIBIT 1004
Page 133 of 4822

05/01/2017	66	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Responsive Claim Construction Brief (with Exhibits 1-7) filed by Sonos Inc..(Rovner, Philip) (Entered: 05/01/2017)
05/01/2017	67	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Objections and Responses to Plaintiffs' Second Set of Requests for Production of Documents filed by Sonos Inc..(Rovner, Philip) (Entered: 05/01/2017)
05/02/2017		CORRECTING ENTRY: The exhibits (A-H) filed at D.I. 65 have been removed from that filing per counsel's request. The exhibits were to be filed under seal. Counsel will refile accordingly. (nms) (Entered: 05/02/2017)
05/02/2017	68	[SEALED] EXHIBITS A-H to 65 Amended Complaint, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 5/2/2017 (nms). (Entered: 05/02/2017)
05/02/2017	69	REDACTED VERSION of 68 Exhibits, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 5/2/2017 (nms). (Entered: 05/02/2017)
05/09/2017	70	NOTICE of Defendant Sonos, Inc.'s Objections and Response to Defendants' First Notice of 30(b)(6) Deposition by Sonos Inc. re 53 Notice to Take Deposition (Rovner, Philip) (Entered: 05/09/2017)
05/10/2017	71	NOTICE to Take Deposition of Sonos, Inc. (Amended) on May 12, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 05/10/2017)
05/10/2017	72	NOTICE to Take Deposition of Nicholas Millington on May 12, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Main Document 72 replaced on 5/11/2017) (nms). (Entered: 05/10/2017)
05/11/2017		CORRECTING ENTRY: The pdf for D.I. 72 has been replaced per counsel's request. The title of the document has been corrected. The NEF has been regenerated. (nms) (Entered: 05/11/2017)
05/15/2017	73	NOTICE OF SERVICE of Plaintiffs' Reply Claim Construction Brief filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 05/15/2017)
05/15/2017	74	ANSWER to 65 Amended Complaint with Jury Demand, and COUNTERCLAIMS against D&M Holdings Inc., D&M Holdings U.S. Inc. by Sonos Inc.. (Attachments: # 1 Exhibits A-F)(Rovner, Philip) Modified on 5/16/2017 (nms). (Entered: 05/15/2017)
05/16/2017	75	[SEALED] Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding motion to compel. (Flynn, Michael) (Entered: 05/16/2017)
05/16/2017	76	[SEALED] DECLARATION of John M. Jackson re 75 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A - O)(Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/16/2017	77	REDACTED VERSION of 75 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/16/2017	78	REDACTED VERSION of 76 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/17/2017	79	Letter to The Honorable Richard G. Andrews from Philip A. Rovner regarding Motion to Compel. (Attachments: # 1 Exhibits A-B)(Rovner, Philip) Modified on 5/17/2017 (nms). (Entered: 05/17/2017)
05/17/2017	80	ORDER Regarding Discovery: The Discovery Conference set for 5/18/2017, at 9:00 AM is POSTPONED (see Order for further details). Signed by Judge

LINKPLAY EXHIBIT 1004
Page 134 of 4822

		Richard G. Andrews on 5/17/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(ksr,) (Entered: 05/17/2017)
05/17/2017	81	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Responses to Plaintiffs' Third Set of Interrogatories [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 05/17/2017)
05/18/2017	82	[SEALED] Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding submission pursuant to the Court's May 17, 2017 Order. (Flynn, Michael) Modified on 5/19/2017 (nms). (Entered: 05/18/2017)
05/18/2017	83	[SEALED] DECLARATION of Matthew C. Acosta re 82 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-F)(Flynn, Michael) Modified on 11/28/2017 (nms). (Entered: 05/18/2017)
05/19/2017	84	DECLARATION of Philip A. Rovner re 80 Order, by Sonos Inc.. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 5/19/2017 (nms). (Entered: 05/19/2017)
05/19/2017	85	DISCOVERY ORDER. Signed by Judge Richard G. Andrews on 5/19/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 05/19/2017)
05/22/2017	86	ORAL ORDER: The Discovery Order issued on May 19, 2017, is being revised. The disposition of the order will remain the same. Ordered by Judge Richard G. Andrews on 5/22/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 05/22/2017)
05/25/2017	87	REDACTED VERSION of 82 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/25/2017 (nms). (Entered: 05/25/2017)
05/25/2017	88	REDACTED VERSION of 83 Declaration, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-F)(Flynn, Michael) Modified on 5/25/2017 (nms). (Entered: 05/25/2017)
05/25/2017	89	STIPULATION and Order to Extend Time - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 5/26/2017 (nms). (Entered: 05/25/2017)
05/26/2017		SO ORDERED, re 89 STIPULATION and Order to Extend Time (* Reset Deadlines: Joint Claim Construction Brief due by 6/1/2017). Signed by Judge Richard G. Andrews on 5/26/2017. (nms) (Entered: 05/26/2017)
05/30/2017	90	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Surreply Claim Construction Brief (with Exhibits 8-10) filed by Sonos Inc..(Rovner, Philip) (Entered: 05/30/2017)
05/30/2017	91	ANSWER to 74 Counterclaims, by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) Modified on 5/31/2017 (nms). (Entered: 05/30/2017)
06/01/2017	92	Joint Claim Construction Brief, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Tabs A-B)(Flynn, Michael) Modified on 6/2/2017 (nms). (Entered: 06/01/2017)
06/02/2017	93	AMENDED DISCOVERY ORDER (see original Order at 281 in 14-cv-1330-RGA, 85 in 16-cv-141-RGA). Signed by Judge Richard G. Andrews on 6/2/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA (nms) (Entered: 06/02/2017)
06/07/2017	94	NOTICE OF SERVICE of (1) Plaintiffs' First Set of Requests for Admission to Defendant; (2) Plaintiffs' First Set of Requests for Admission to Defendant Directed to Authenticity of Documents; and (3) Plaintiffs' Fourth Set of Interrogatories to Defendant filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 06/07/2017)
06/07/2017	95	

LINKPLAY EXHIBIT 1004
Page 135 of 4822

		NOTICE to Take Deposition of Plaintiffs D&M Holdings Inc. d/b/a The D+M Group, and D&M Holdings U.S. Inc. on June 23, 2017 filed by Sonos Inc..(Choa, Jonathan) (Entered: 06/07/2017)
06/08/2017	96	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Second Set of Interrogatories to Plaintiffs and Defendant Sonos, Inc.'s First Set of Requests for Admission to Plaintiffs Directed to Authenticity of Documents filed by Sonos Inc..(Rovner, Philip) (Entered: 06/08/2017)
06/16/2017	97	ORAL ORDER: The Court will hear argument at the Markman on no more than ten of the disputed terms. The parties are instructed to submit a letter by 5 p.m. June 19th advising which terms they will be arguing on June 21st. Ordered by Judge Richard G. Andrews on 6/16/2017. (nms) (Entered: 06/16/2017)
06/19/2017	98	ORAL ORDER: The Markman Hearing set for 6/21/2017, at 9:00 AM will now be held in Courtroom 2A before Judge Richard G. Andrews. Ordered by Judge Richard G. Andrews on 6/19/2017. (nms) (Entered: 06/19/2017)
06/19/2017	99	Letter to The Honorable Richard G. Andrews from the parties regarding terms/phrases to be argued at upcoming Markman hearing. (Flynn, Michael) Modified on 6/20/2017 (nms). (Entered: 06/19/2017)
06/21/2017		Minute Entry for proceedings held before Judge Richard G. Andrews - Markman Hearing held on 6/21/2017. Appearances: M. Flynn, J. Jackson, M. Acosta for Plaintiffs; P. Rovner, A. Silverstein, S. Sullivan, R. Shea, G. Lee for Defendants. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 06/22/2017)
06/26/2017	100	Letter to The Honorable Richard G. Andrews from Michael Flynn regarding the Court's oral order during the Markman hearing held on June 21, 2017. (Flynn, Michael) (Entered: 06/26/2017)
06/27/2017	101	Official Transcript of Markman Hearing held on 06-21-17 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 7/18/2017. Redacted Transcript Deadline set for 7/28/2017. Release of Transcript Restriction set for 9/25/2017. (lad) (Entered: 06/27/2017)
06/28/2017	102	Letter to the Honorable Richard G. Andrews from Philip A. Rovner, Esq. regarding response to D&M's June 26, 2017 letter (D.I. 100). (Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/28/2017)
06/29/2017	103	STIPULATION and [Proposed] Order to Amend Case Schedule by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 06/29/2017)
06/30/2017	104	SO ORDERED, re 103 Stipulation filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 6/29/2017. (ksr,) (Entered: 06/30/2017)
06/30/2017	105	NOTICE of Subpoenas by Sonos Inc. (Attachments: # 1 Exhibit A-N) (Rovner, Philip) (Entered: 06/30/2017)
07/07/2017	106	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Responses to Plaintiffs' First Set of Requests for Admission Directed to Authenticity of Documents [Highly Confidential - Attorneys' Eyes Only]; Defendant Sonos, Inc.'s Responses to Plaintiffs' Fourth Set of Interrogatories [Highly Confidential - Attorneys' Eyes Only]; and Defendant Sonos, Inc.'s Responses to Plaintiffs' First Set of Requests for Admission [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 07/07/2017)
07/07/2017	107	NOTICE to Take Deposition of Sonos, Inc. Pursuant to Fed. R. Civ. P. 30(b)(6) on July 28, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)

LINKPLAY EXHIBIT 1004
Page 136 of 4822

07/07/2017	108	NOTICE to Take Deposition of Michael Papish on July 28, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	109	NOTICE to Take Deposition of Robert Lambourne on July 31, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	110	NOTICE to Take Deposition of Andrew Schulert on July 31, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	111	NOTICE to Take Deposition of Thomas Cullen on August 1, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	112	NOTICE to Take Deposition of Michael Feinberg on August 1, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	113	NOTICE to Take Deposition of David Feick on August 2, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	114	NOTICE to Take Deposition of Patrick Spence on August 2, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	115	NOTICE to Take Deposition of Ted Coburn on August 3, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	116	NOTICE to Take Deposition of Jon Cotter on August 3, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	117	NOTICE to Take Deposition of Tim Sheen on August 4, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	118	NOTICE to Take Deposition of Christopher Kallai on August 4, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	119	NOTICE to Take Deposition of Gang Song on August 17, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	120	NOTICE to Take Deposition of Constantine Reissis on August 17, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	121	NOTICE to Take Deposition of Steve Hambling on August 18, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	122	NOTICE to Take Deposition of Cullen Harwood on August 18, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	123	NOTICE to Take Deposition of Benjamin Rappaport on August 22, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	124	NOTICE to Take Deposition of Nicholas Millington on August 28, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	125	NOTICE OF SERVICE of (1) Plaintiffs' Objections and Responses to Defendant Sonos, Inc.'s Second Set of Interrogatories, and (2) Plaintiffs' Objections and Responses to Defendant Sonos, Inc.'s First Set of Requests

LINKPLAY EXHIBIT 1004
Page 137 of 4822

		for Admission Directed to Authenticity of Documents filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/07/2017)
07/07/2017	126	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Notice of Deposition of Richard R. Hyatt filed by Sonos Inc..(Rovner, Philip) (Entered: 07/07/2017)
07/11/2017	127	NOTICE OF SERVICE of Plaintiffs' Amended Initial Disclosures Pursuant to Section 3(B) of the Scheduling Order filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/11/2017)
07/14/2017	128	MOTION for Pro Hac Vice Appearance of Attorney Jae Y. Pak - filed by Sonos Inc.. (Rovner, Philip) (Entered: 07/14/2017)
07/14/2017		SO ORDERED, re 128 MOTION for Pro Hac Vice Appearance of Attorney Jae Y. Pak, filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 7/14/2017. (nms) (Entered: 07/14/2017)
07/21/2017	129	AMENDED Notice to Take Deposition of Andrew Schulert, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 7/24/2017 (nms). (Entered: 07/21/2017)
07/21/2017	130	AMENDED Notice to Take Deposition of David Feick, by D&M Holdings Inc., D&M Holdings U.S. Inc.. . (Flynn, Michael) Modified on 7/24/2017 (nms). (Entered: 07/21/2017)
07/21/2017	131	AMENDED Notice to Take Deposition of Jon Cotter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 7/24/2017 (nms). (Entered: 07/21/2017)
07/24/2017	132	NOTICE OF SERVICE of Non-Party Aaron Graham's Objections to Defendant Sonos, Inc.'s Subpoena to Produce Documents, Information or Objects or to Permit Inspection of Premises in a Civil Action filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/24/2017)
07/25/2017	133	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Amended Preliminary Election of Prior Art filed by Sonos Inc..(Rovner, Philip) (Entered: 07/25/2017)
07/25/2017	134	OBJECTIONS and Response to 107 Second Notice to Take Deposition, by Sonos Inc.. (Rovner, Philip) Modified on 7/26/2017 (nms). (Entered: 07/25/2017)
07/26/2017		Pro Hac Vice Attorney Jae Y. Pak for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (lmm) (Entered: 07/26/2017)
07/26/2017	135	NOTICE OF SERVICE of (1) Nonparty Charlesbank Capital Partners, LLC's Objections to Defendant Sonos, Inc.'s Subpoena to Testify at a Deposition in a Civil Action, (2) Nonparty Charlesbank Capital Partners, LLC's Objections to Defendant Sonos, Inc.'s Subpoena to Produce Documents, Information or Objects or to Permit Inspection of Premises in a Civil Action, (3) Nonparty Sound United, LLC's Objections to Defendant Sonos, Inc.'s Subpoena to Testify at a Deposition in a Civil Action and (4) Nonparty Sound United, LLC's Objections to Defendant Sonos, Inc.'s Subpoena to Produce Documents, Information or Objects or to Permit Inspection of Premises in a Civil Action filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 07/26/2017)
08/01/2017	136	Second Amended NOTICE to Take Deposition of David Feick on September 1, 2017, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 8/2/2017 (nms). (Entered: 08/01/2017)
08/03/2017	137	MEMORANDUM OPINION providing claim construction of multiple terms in U.S. Patent Nos. 7,734,850, 6,539,210, 6,469,633, 8,755,667, 6,473,441, and 7,987,294. Within five days the parties shall submit a proposed order

LINKPLAY EXHIBIT 1004
Page 138 of 4822

		consistent with this Memorandum Opinion suitable for submission to the jury. Signed by Judge Richard G. Andrews on 8/3/2017. (nms) (Entered: 08/03/2017)
08/07/2017	138	NOTICE OF SERVICE of Plaintiffs' Second Amended Initial Disclosures filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 08/07/2017)
08/07/2017	139	STIPULATION and [Proposed] Order to Amend Case Schedule by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 08/07/2017)
08/08/2017		SO ORDERED re 139 Stipulation and Order to Amend Case Schedule. Signed by Judge Richard G. Andrews on 8/8/2017. (nms) (Entered: 08/08/2017)
08/08/2017	140	PROPOSED Claim Construction Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Letter)(Flynn, Michael) Modified on 8/9/2017 (nms). (Entered: 08/08/2017)
08/09/2017	141	CLAIM CONSTRUCTION ORDER. Signed by Judge Richard G. Andrews on 8/9/2017. (nms) (Entered: 08/09/2017)
08/10/2017	142	Joint STIPULATION Regarding Preservation of Appealable Issues by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 08/10/2017)
08/11/2017	143	SO ORDERED re 142 Joint Stipulation Regarding Preservation of Appealable Issues. Signed by Judge Richard G. Andrews on 8/11/2017. (nms) (Entered: 08/11/2017)
08/14/2017	144	NOTICE OF SERVICE of Plaintiffs' First Amended Objections and Responses to Defendant Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 08/14/2017)
08/15/2017	145	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Amended Initial Disclosures Pursuant to Rule 26(a)(1) of the Federal Rules of Civil Procedures and Section 3 of the District of Delaware's Default Standard for Discovery; Defendant Sonos, Inc.'s Second Amended Responses to Plaintiffs' First Set of Interrogatories (Nos. 1-11) [Highly Confidential - Attorneys' Eyes Only]; Defendant Sonos, Inc.'s Amended Responses to Plaintiffs' Second Set of Interrogatories [Highly Confidential Attorneys' Eyes Only]; and Defendant Sonos, Inc.'s Supplemental Privilege Log [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 08/15/2017)
08/16/2017	146	MOTION for Pro Hac Vice Appearance of Attorney Louis W. Tompros of Wilmer Cutler Pickering Hale and Dorr LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 8/17/2017 (nms). (Entered: 08/16/2017)
08/17/2017		SO ORDERED, re (146 in 16-cv-141-RGA, 401 in 14-cv-1330-RGA) MOTION for Pro Hac Vice Appearance of Attorney Louis W. Tompros of Wilmer Cutler Pickering Hale and Dorr LLP, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 8/17/2017. Associated Cases: 14-cv-1330-RGA, 16-cv-141-RGA(nms) (Entered: 08/17/2017)
08/20/2017	147	STIPULATION to Amend Scheduling Orders, by Sonos Inc.. (Rovner, Philip) Modified on 8/21/2017 (nms). (Entered: 08/20/2017)
08/21/2017	148	ORDER DENYING (D.I. 402 in 14-cv-1330-RGA, D.I. 147 in 16-cv-141-RGA) Stipulation to Amend Scheduling Orders. If the Court is unavailable to try the case on October 2, 2017, the Court hopes to have another judge available to try the case. Signed by Judge Richard G. Andrews on 8/21/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA (nms) (Entered: 08/21/2017)

LINKPLAY EXHIBIT 1004
Page 139 of 4822

08/21/2017	149	MOTION for Pro Hac Vice Appearance of Attorney Robert P. Latham - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC, D&M Holdings Inc.. (Flynn, Michael) (Entered: 08/21/2017)
08/21/2017		SO ORDERED, re (149 in 16-cv-141-RGA, 405 in 14-cv-1330-RGA) MOTION for Pro Hac Vice Appearance of Attorney Robert P. Latham. Signed by Judge Richard G. Andrews on 8/212/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 08/21/2017)
08/21/2017	150	NOTICE OF SERVICE of Plaintiffs' Objections and Responses to Sonos, Inc.'s First Notice of Rule 30(b)(6) Depositiion filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 08/21/2017)
08/23/2017	151	NOTICE to Take Deposition of Kevin Zarow on August 23, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 08/23/2017)
08/23/2017	152	NOTICE to Take Deposition of Brendon Stead on August 24, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 08/23/2017)
08/29/2017	153	STIPULATION TO EXTEND TIME for opening expert reports to September 11, 2017 - filed by Sonos Inc.. (Rovner, Philip) (Entered: 08/29/2017)
08/30/2017		SO ORDERED, re 153 STIPULATION TO EXTEND TIME for opening expert reports to September 11, 2017. Signed by Judge Richard G. Andrews on 8/30/2017. (nms) (Entered: 08/30/2017)
09/08/2017	154	STIPULATION of Dismissal with Prejudice of All Claims and Defenses Regarding U.S. Patent No. 6,473,441, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 9/11/2017 (nms). (Entered: 09/08/2017)
09/11/2017	155	SO ORDERED, re 154 Stipulation and Order of Dismissal with Prejudice of All Claims and Defenses Regarding U.S. Patent No. 6,473,441. Signed by Judge Richard G. Andrews on 9/11/2107. (nms) (Entered: 09/11/2017)
09/12/2017	156	NOTICE OF SERVICE of (1) Expert Report of John R. Bone, CPA, CFF and (2) Opening Expert Report of Dr. Harry Bims Regarding Infringement of United States Patent Nos. filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 09/12/2017)
09/12/2017	157	NOTICE OF SERVICE of Defendant Sonos, Inc.'s Final Election of Asserted Prior Art and Final Invalidity Contentions; and Opening Expert Report of Andrew Wolfe regarding the Invalidity of U.S. Patent Nos. 7,987,294, 7,734,850, & 7,995,899 filed by Sonos Inc..(Rovner, Philip) (Entered: 09/12/2017)
09/14/2017	158	MOTION for Pro Hac Vice Appearance of Attorney Cole B. Richter - filed by Sonos Inc.. (Rovner, Philip) (Entered: 09/14/2017)
09/14/2017		SO ORDERED, re 158 MOTION for Pro Hac Vice Appearance of Attorney Cole B. Richter, filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 9/14/2017. (nms) (Entered: 09/14/2017)
09/15/2017		Pro Hac Vice Attorney Cole B. Richter for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (lmm) (Entered: 09/15/2017)
09/15/2017	159	NOTICE OF SERVICE of Plaintiffs' Second Amended Objections and Responses to Defendant Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 09/15/2017)
09/15/2017	160	NOTICE to Take Deposition of Tad Coburn on October 5, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 09/15/2017)
09/27/2017	161	Joint STIPULATION extending time for damages expert reports by Sonos Inc.. (Rovner, Philip) (Entered: 09/27/2017)

LINKPLAY EXHIBIT 1004
Page 140 of 4822

09/28/2017		SO ORDERED, re 161 Joint Stipulation Extending Time for Damages Expert Reports. Signed by Judge Richard G. Andrews on 9/27/2017. (nms) (Entered: 09/28/2017)
10/03/2017	162	NOTICE OF SERVICE of Rebuttal Expert Report of Dr. Jay P. Kesan Regarding Validity of U.S. Patent Nos. 7,987,294, 7,734,850, and 7,995,899 filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 10/03/2017)
10/03/2017	163	NOTICE OF SERVICE of Rebuttal Expert Report of Dr. Kevin C. Almeroth regarding U.S. Patent Nos. 7,987,294, and 7,995,899 [Highly Confidential - Attorneys' Eyes Only/ Highly Confidential - Source Code] filed by Sonos Inc..(Rovner, Philip) (Entered: 10/03/2017)
10/06/2017	164	NOTICE OF SERVICE of Rebuttal Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 10/06/2017)
10/09/2017	165	NOTICE OF SERVICE of Addendum Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 10/09/2017)
10/12/2017	166	MOTION to Narrow Issues for Trial and Stay U.S.Patent 7,987,294 Pending Inter Partes Review - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/13/2017 (nms). (Entered: 10/12/2017)
10/12/2017	167	[SEALED] OPENING BRIEF in Support re 166 MOTION to Narrow Issues for Trial and Stay U.S.Patent 7,987,294 Pending Inter Partes Review, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 10/26/2017. (Attachments: # 1 Exhibits A-E)(Rovner, Philip) Modified on 10/13/2017 (nms). (Entered: 10/12/2017)
10/17/2017	168	STIPULATION TO EXTEND TIME deadline for reply expert reports and certain supplemental expert reports to October 23, 2017 - filed by Sonos Inc.. (Rovner, Philip) (Entered: 10/17/2017)
10/18/2017		SO ORDERED, re 168 STIPULATION TO EXTEND TIME deadline for reply expert reports and certain supplemental expert reports to October 23, 2017. Signed by Judge Richard G. Andrews on 10/18/2017. (nms) (Entered: 10/18/2017)
10/19/2017	169	Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding Motion to Narrow the Issues for Trial and Stay U.S. Patent 7,987,294 (D.I. 166 . (Rovner, Philip) Modified on 10/23/2017 (nms). (Entered: 10/19/2017)
10/20/2017	170	Letter to The Honorable Richard G. Andrews from Jack B. Blumenfeld regarding Defendant Sonos's letter requesting that the Court expedite consideration of Sonos's pending motion to stay with regard to the '294 patent (D.I. 169). (Blumenfeld, Jack) Modified on 10/23/2017 (nms). (Entered: 10/20/2017)
10/23/2017		REDACTION NOTICE: In accordance with section G of the Administrative Procedures Governing Filing and Service by Electronic Means, redacted versions of sealed documents shall be filed electronically within 7 days of the filing of the sealed document. The records of this case do not reflect the filing of a redacted version of DI # 167 . (nms) (Entered: 10/23/2017)
10/23/2017	171	REDACTED VERSION of 167 Opening Brief in Support, by Sonos Inc.. (Attachments: # 1 Exhibits A-E)(Rovner, Philip) Modified on 10/23/2017 (nms). (Entered: 10/23/2017)
10/24/2017	172	NOTICE OF SERVICE of (1) Reply Expert Report of Dr. Harry Bims Regarding U.S. Patent Nos. 7,987,294 and 7,995,899; (2) Supplemental Rebuttal Expert Report of Dr. Jay P. Kesan Regarding Validity of U.S. Patent Nos. 7,987,294; 7,734,850; and 7,995,899; and (3) Rebuttal Expert Report of Dr. Jay P. Kesan Regarding Validity of U.S. Patent No. 7,734,850 filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 10/24/2017)

LINKPLAY EXHIBIT 1004
Page 141 of 4822

10/24/2017	173	NOTICE OF SERVICE of Reply Expert Report of Andrew Wolfe regarding the Invalidity of U.S. Patent Nos. 7,987,294 & 7,995,899 (with Exhibits 1-1 and 5 and Appendix D) filed by Sonos Inc..(Rovner, Philip) (Entered: 10/24/2017)
10/24/2017	174	NOTICE OF SERVICE of Rebuttal Expert Report of Dr. Kevin C. Almeroth regarding U.S. Patent No. 7,734,850 (with Exhibits) [Highly Confidential - Attorneys' Eyes Only / Highly Confidential - Source Code] filed by Sonos Inc..(Rovner, Philip) (Entered: 10/24/2017)
10/26/2017	175	NOTICE OF SERVICE of Reply Expert Report of John R. Bone, CPA, CFF filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 10/26/2017)
10/26/2017	176	[SEALED] ANSWERING BRIEF in Opposition re 166 MOTION to Narrow Issues for Trial and Stay U.S.Patent 7,987,294 Pending Inter Partes Review filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 11/2/2017. (Attachments: # 1 Exhibits A-E)(Flynn, Michael) (Entered: 10/26/2017)
10/27/2017	177	MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850 - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/27/2017 (nms). (Entered: 10/27/2017)
10/27/2017	178	[SEALED] OPENING BRIEF in Support re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Rovner, Philip) Modified on 10/27/2017 (nms). (Entered: 10/27/2017)
10/27/2017	179	[SEALED] DECLARATION of Philip A. Rovner re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850, by Sonos Inc.. (Attachments: # 1 Exhibits 1-5, # 2 Exhibits 6-8, # 3 Exhibit 9, # 4 Exhibit 10 part 1, # 5 Exhibit 10 part 2, # 6 Exhibit 11 part 1, # 7 Exhibit 11 part 2, # 8 Exhibits 12-13)(Rovner, Philip) Modified on 10/27/2017 (nms). (Entered: 10/27/2017)
10/27/2017	180	MOTION for Summary Judgment on Three of Defendant's Affirmative Defenses and Counterclaims - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	181	[SEALED] OPENING BRIEF in Support re 180 MOTION for Summary Judgment on Three of Defendant's Affirmative Defenses and Counterclaims, filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Flynn, Michael) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	182	[SEALED] DECLARATION of John M. Jackson re 180 MOTION for Summary Judgment on Three of Defendant's Affirmative Defenses and Counterclaims, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits A-K)(Flynn, Michael) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	183	MOTION to Preclude the Expert Testimony of Attorney Dr. Kesan - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	184	[SEALED] OPENING BRIEF in Support re 183 MOTION to Preclude the Expert Testimony of Attorney Dr. Kesan, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	185	[SEALED] DECLARATION of Philip A. Rovner re 183 MOTION to Preclude the Expert Testimony of Attorney Dr. Kesan, by Sonos Inc.. (Attachments: # 1 Exhibits A-I)(Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	186	

LINKPLAY EXHIBIT 1004
Page 142 of 4822

		MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899 - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	187	MOTION to Strike Expert Opinions of Sonos Experts Michael Tate and Kevin Almeroth - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	188	[SEALED] OPENING BRIEF in Support re 187 MOTION to Strike Expert Opinions of Sonos Experts Michael Tate and Kevin Almeroth, filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Flynn, Michael) Modified on 10/30/2017 (nms). (Main Document 188 replaced on 10/30/2017) (nms). (Entered: 10/27/2017)
10/27/2017	189	[SEALED] DECLARATION of John M. Jackson re 187 MOTION to Strike Expert Opinions of Sonos Experts Michael Tate and Kevin Almeroth, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 1-5)(Flynn, Michael) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	190	[SEALED] OPENING BRIEF in Support re 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	191	MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier Invention Date of U.S. Patent No. 7,987,294 - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	192	[SEALED] OPENING BRIEF in Support re 191 MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier Invention Date of U.S. Patent No. 7,987,294, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	193	MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899 - filed by Sonos Inc.. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	194	[SEALED] OPENING BRIEF in Support re 193 MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 11/13/2017. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	195	[SEALED] DECLARATION of Philip A. Rovner re 193 MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899, by Sonos Inc.. (Attachments: # 1 Exhibits A-H)(Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	196	[SEALED] DECLARATION of Philip A. Rovner re 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899, by Sonos Inc.. (Attachments: # 1 Exhibits A-X)(Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	197	[SEALED] DECLARATION of Philip A. Rovner re 191 MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier Invention Date of U.S. Patent No. 7,987,294, by Sonos Inc.. (Attachments: # 1 Exhibits A-P)(Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/27/2017	198	[SEALED] DECLARATION of Dr. Kevin C. Almeroth re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850, 193 MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899, 191 MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier

LINKPLAY EXHIBIT 1004
Page 143 of 4822

		Invention Date of U.S. Patent No. 7,987,294, by Sonos Inc.. (Rovner, Philip) Modified on 10/30/2017 (nms). (Entered: 10/27/2017)
10/30/2017		CORRECTING ENTRY: The pdf for D.I. 188 has been replaced per counsel's request. Editing errors have been corrected, and the title of the filing has been updated. (nms) (Entered: 10/30/2017)
10/30/2017	199	[SEALED] REPLY BRIEF re 166 MOTION to Narrow Issues for Trial and Stay U.S.Patent 7,987,294 Pending Inter Partes Review filed by Sonos Inc.. (Attachments: # 1 Exhibit F-G)(Rovner, Philip) (Entered: 10/30/2017)
11/02/2017	200	REDACTED VERSION of 176 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits A-E)(Flynn, Michael) (Entered: 11/02/2017)
11/03/2017	201	ORAL ORDER: A conference is now set for 11/9/2017, at 9:00 AM in Chambers (Room 6325) to take up the Motion to Narrow Issues for Trial and Stay U.S. Patent 7,987,294 Pending Inter Partes Review (D.I. 166). Ordered by Judge Richard G. Andrews on 11/3/2017. (nms) (Entered: 11/03/2017)
11/03/2017	202	REDACTED VERSION of 181 Opening Brief in Support, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 11/6/2017 (nms). (Entered: 11/03/2017)
11/03/2017	203	REDACTED VERSION of 182 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 11/6/2017 (nms). (Entered: 11/03/2017)
11/03/2017	204	REDACTED VERSION of 188 Opening Brief in Support, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 11/6/2017 (nms). (Entered: 11/03/2017)
11/03/2017	205	REDACTED VERSION of 189 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 11/6/2017 (nms). (Entered: 11/03/2017)
11/06/2017	206	REDACTED VERSION of 178 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	207	REDACTED VERSION of 179 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits 1-5, # 2 Exhibit 6-8, # 3 Exhibit 9, # 4 Exhibit 10 part 1, # 5 Exhibit 10 part 2, # 6 Exhibit 11 part 1, # 7 Exhibit 11 part 2, # 8 Exhibit 12-13)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	208	REDACTED VERSION of 184 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	209	REDACTED VERSION of 185 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-I)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	210	REDACTED VERSION of 190 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	211	REDACTED VERSION of 196 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-X)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	212	REDACTED VERSION of 192 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	213	REDACTED VERSION of 197 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-P)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	214	REDACTED VERSION of 194 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	215	

LINKPLAY EXHIBIT 1004
Page 144 of 4822

		REDACTED VERSION of 195 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-H)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	216	REDACTED VERSION of 198 Declaration of Dr. Kevin C. Almeroth, by Sonos Inc.. (Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/06/2017	217	REDACTED VERSION of 199 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibits F-G)(Rovner, Philip) Modified on 11/7/2017 (nms). (Entered: 11/06/2017)
11/09/2017	218	ORDER Denying without prejudice 166 MOTION to Narrow Issues for Trial and Stay U.S.Patent 7,987,294 Pending Inter Partes Review. Signed by Judge Richard G. Andrews on 11/9/2017. (nms) (Entered: 11/09/2017)
11/09/2017		Minute Entry for proceedings held before Judge Richard G. Andrews - A Conference was held on 11/9/2017. Counsel present for Plaintiffs: J. Blumenfeld, M. Flynn, J. Jackson. Counsel present for Defendant: G. Lee, C. Richter, P. Rovner. (Court Reporter Valerie Gunning.) (nms) (Entered: 11/09/2017)
11/13/2017	219	STIPULATION and [proposed] order regarding Sonos, Inc.'s Motion to Exclude the Expert Testimony of Attorney Dr. Kesan by Sonos Inc.. (Rovner, Philip) (Entered: 11/13/2017)
11/14/2017	220	SO ORDERED re 219 Stipulation and Order Regarding Sonos, Inc.'s Motion to Exclude the Expert Testimony of Attorney Dr. Kesan. Signed by Judge Richard G. Andrews on 11/14/2017. (nms) (Entered: 11/14/2017)
11/15/2017	221	STIPULATION of Dismissal with Prejudice of Sonos's Three Affirmative Defenses and Counterclaims of Patent Exhuastion, Misuse, and Unclean Hands, by Sonos Inc.. (Rovner, Philip) Modified on 11/16/2017 (nms). (Entered: 11/15/2017)
11/15/2017	222	[SEALED] ANSWERING BRIEF in Opposition re 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 11/22/2017. (Flynn, Michael) (Entered: 11/15/2017)
11/15/2017	223	[SEALED] ANSWERING BRIEF in Opposition re 191 MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier Invention Date of U.S. Patent No. 7,987,294 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 11/22/2017. (Flynn, Michael) (Entered: 11/15/2017)
11/15/2017	224	[SEALED] ANSWERING BRIEF in Opposition re 193 MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 11/22/2017. (Flynn, Michael) (Entered: 11/15/2017)
11/15/2017	225	[SEALED] ANSWERING BRIEF in Opposition re 187 MOTION to Strike Expert Opinions of Sonos Experts Michael Tate and Kevin Almeroth filed by Sonos Inc..Reply Brief due date per Local Rules is 11/22/2017. (Rovner, Philip) (Entered: 11/15/2017)
11/15/2017	226	[SEALED] DECLARATION of Philip A. Rovner re 225 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibits A-G)(Rovner, Philip) Modified on 11/16/2017 (nms). (Entered: 11/15/2017)
11/15/2017	227	[SEALED] ANSWERING BRIEF in Opposition re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..Reply Brief due date per Local Rules is 11/22/2017. (Flynn, Michael) (Entered: 11/15/2017)
11/15/2017	228	[SEALED] DECLARATION of John M. Jackson, Part 1 re 223 Answering Brief in Opposition, 222 Answering Brief in Opposition, 227 Answering Brief in Opposition, and 224 Answering Brief in Opposition, by D&M

LINKPLAY EXHIBIT 1004
Page 145 of 4822

		Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 1-3)(Flynn, Michael) Modified on 11/16/2017 (nms). (Entered: 11/15/2017)
11/15/2017	229	[SEALED] Declaration of John M. Jackson, part 2 re Answering Briefs (D.I. 223 , 222 , 227 , and 224 , by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 3)(Flynn, Michael) Modified on 11/16/2017 (nms). Modified on 11/16/2017 (nms). (Entered: 11/15/2017)
11/15/2017	230	[SEALED] Declaration of John M. Jackson, part 3 re Answering Briefs (D.I. 222 , 223 , 224 , and 227), by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 9-11)(Flynn, Michael) Modified on 11/16/2017 (nms). (Entered: 11/15/2017)
11/16/2017	231	NOTICE OF SERVICE of (1) Reply Expert Report of Dr. Harry Bims Regarding U.S. Patent No. 7,734,850 and (2) Supplemental Expert Report of Jay P. Kesan Regarding the Validity of Asserted Claims of U.S. 7,734,850 filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/16/2017)
11/16/2017	232	SO ORDERED Granting 221 Stipulation of Dismissal with Prejudice of Sonos's Three Affirmative Defenses and Counterclaims of Patent Exhaustion, Misuse, and Unclean Hands. Signed by Judge Richard G. Andrews on 11/16/2017. (nms) (Entered: 11/16/2017)
11/21/2017	233	REDACTED VERSION of 222 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	234	REDACTED VERSION of 223 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	235	REDACTED VERSION of 224 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	236	REDACTED VERSION of 227 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	237	REDACTED VERSION of 228 Declaration, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	238	REDACTED VERSION of 229 Exhibit to a Document, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	239	REDACTED VERSION of 230 Exhibit to a Document by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/21/2017)
11/22/2017	240	[SEALED] REPLY BRIEF re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850 filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/22/2017)
11/22/2017	241	[SEALED] DECLARATION of Philip A. Rovner re 240 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 11/27/2017 (nms). (Entered: 11/22/2017)
11/22/2017	242	[SEALED] DECLARATION of Dr. Andrew Wolfe re 240 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 11/27/2017 (nms). (Entered: 11/22/2017)
11/22/2017	243	[SEALED] REPLY BRIEF re 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899 filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/22/2017)
11/22/2017	244	REPLY BRIEF re 191 MOTION for Summary Judgment of (1) Noninfringement of U.S. Patent No. 7,987,294 and (2) No Earlier

LINKPLAY EXHIBIT 1004
Page 146 of 4822

		Invention Date of U.S. Patent No. 7,987,294 filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/22/2017)
11/22/2017	245	[SEALED] DECLARATION of Philip A. Rovner re 244 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibits Q-DD)(Rovner, Philip) Modified on 11/27/2017 (nms). (Entered: 11/22/2017)
11/22/2017	246	[SEALED] REPLY BRIEF re 187 MOTION to Strike Expert Opinions of Sonos Experts Michael Tate and Kevin Almeroth, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 11/27/2017 (nms). (Entered: 11/22/2017)
11/22/2017	247	[SEALED] DECLARATION of John M. Jackson re 246 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3)(Flynn, Michael) Modified on 11/27/2017 (nms). (Entered: 11/22/2017)
11/22/2017	248	REPLY BRIEF re 193 MOTION for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899 filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/22/2017)
11/28/2017		REDACTION NOTICE: In accordance with section G of the Administrative Procedures Governing Filing and Service by Electronic Means, redacted versions of sealed documents shall be filed electronically within 7 days of the filing of the sealed document. The records of this case do not reflect the filing of redacted versions of DI # 225 and 226 . (nms) Modified on 11/28/2017 (nms). (Entered: 11/28/2017)
11/28/2017		CORRECTING ENTRY: The docket text for the redaction notice filed on 11/28/2017, has been corrected to reflect a link to D.I. 225 and 226. (nms) (Entered: 11/28/2017)
11/28/2017	249	NOTICE OF SERVICE of Reply Expert Report of Andrew Wolfe Regarding the Invalidity of U.S. Patent No. 7,734,850 (with Exhibits 1 & 2) filed by Sonos Inc..(Rovner, Philip) (Entered: 11/28/2017)
11/29/2017	250	REDACTED VERSION of 246 Reply Brief by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/29/2017)
11/29/2017	251	REDACTED VERSION of 247 Declaration by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 11/29/2017)
11/29/2017	252	REDACTED VERSION of 225 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 11/30/2017 (nms). (Entered: 11/29/2017)
11/29/2017	253	REDACTED VERSION of 226 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-G)(Rovner, Philip) Modified on 11/30/2017 (nms). (Entered: 11/29/2017)
11/30/2017	254	REDACTED VERSION of 240 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 12/1/2017 (nms). (Entered: 11/30/2017)
11/30/2017	255	REDACTED VERSION of 241 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 12/1/2017 (nms). (Entered: 11/30/2017)
11/30/2017	256	REDACTED VERSION of 243 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 12/1/2017 (nms). (Entered: 11/30/2017)
11/30/2017	257	REDACTED VERSION of 242 Declaration of Dr. Andrew Wolfe, by Sonos Inc.. (Rovner, Philip) Modified on 12/1/2017 (nms). (Entered: 11/30/2017)
11/30/2017	258	REDACTED VERSION of 245 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibit Q-DD)(Rovner, Philip) Modified on 12/1/2017 (nms). (Entered: 11/30/2017)
12/18/2017	259	ORAL ORDER: Oral argument on the motions for summary judgment (D.I. 177 , 186 , 191 , and 193) is now set for 1/30/2018, at 9:00 AM in Courtroom 6A. Ordered by Judge Richard G. Andrews on 12/18/2017. (nms) (Entered: 12/18/2017)

LINKPLAY EXHIBIT 1004
Page 147 of 4822

12/21/2017		ORAL ORDER: A Telephone Conference has been scheduled to discuss mediation for January 9, 2018 at 12:00 noon Eastern to be initiated by counsel for Sonos. Ordered by Judge Mary Pat Thynge on 12/21/2017. Associated Cases: 1:14-cv-01330-WCB, 1:16-cv-00141-RGA(dlb) (Entered: 12/21/2017)
01/04/2018	260	NOTICE OF SERVICE of Supplemental Reply Expert Report of Andrew Wolfe Regarding the Invalidity of U.S. Patent No. 7,987,294 filed by Sonos Inc..(Rovner, Philip) (Entered: 01/04/2018)
01/05/2018		CORRECTING ENTRY: The Notice of Multi-Media filing filed at D.I. 261 has been removed from the docket. Counsel should submit the hyperlinked briefs under the cover of a letter. (nms) (Entered: 01/05/2018)
01/05/2018	261	Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding hyperlinked briefs. (Flynn, Michael) (Entered: 01/05/2018)
01/05/2018	262	Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding enclosing two compact discs containing hyperlinked briefs. (Rovner, Philip) Modified on 1/8/2018 (nms). (Entered: 01/05/2018)
01/15/2018	263	NOTICE to Take Deposition of John Bone on January 16, 2018 filed by Sonos Inc..(Rovner, Philip) (Entered: 01/15/2018)
01/25/2018	264	NOTICE to Take Deposition of Michael Tate on February 6, 2018 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 01/25/2018)
01/25/2018	265	NOTICE to Take Deposition of Kevin Almeroth on February 16, 2018 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 01/25/2018)
01/25/2018	266	NOTICE to Take Deposition of Andrew Wolfe on February 21, 2018 filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) (Entered: 01/25/2018)
01/25/2018	267	Unopposed MOTION for Leave to File a Sur-Reply in Opposition to Motion for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibit 1)(Flynn, Michael) Modified on 1/26/2018 (nms). (Entered: 01/25/2018)
01/26/2018		SO ORDERED, re 267 Unopposed MOTION for Leave to File a Sur-Reply in Opposition to Motion for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850. Signed by Judge Richard G. Andrews on 1/26/2018. (nms) (Entered: 01/26/2018)
01/26/2018	268	SUR-REPLY BRIEF re 177 MOTION for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent No. 7,734,850, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (nms) (Entered: 01/26/2018)
01/29/2018	269	ORDER focusing the argument set for 1/20/2018 (see Order for further details). Signed by Judge Richard G. Andrews on 1/29/2018. (nms) (Entered: 01/29/2018)
01/30/2018		Minute Entry for proceedings held before Judge Richard G. Andrews - Oral Argument held on 1/30/2018. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 01/30/2018)
01/30/2018	270	Official Transcript of conference held on November 9, 2017 before Judge Andrews. Court Reporter/Transcriber Valerie Gunning,Telephone number (302) 573-6194. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 2/20/2018. Redacted Transcript Deadline set for 3/2/2018. Release of Transcript Restriction set for 4/30/2018. (vjg) (Entered: 01/30/2018)
01/31/2018	271	

LINKPLAY EXHIBIT 1004
Page 148 of 4822

		Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding Dr. Peter Celinski Documents for '294 Patent. (Flynn, Michael) (Entered: 01/31/2018)
01/31/2018	272	NOTICE to Take Deposition of Dr. Harry Bims on February 2, 2018 filed by Sonos Inc..(Rovner, Philip) (Entered: 01/31/2018)
02/01/2018	273	Proposed STIPULATED Schedule for Supplemental Claim Construction Briefing, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 2/1/2018 (nms). (Entered: 02/01/2018)
02/01/2018		SO ORDERED, re 273 Proposed Stipulated Schedule for Supplemental Claim Construction Briefing. Signed by Judge Richard G. Andrews on 2/1/2018. (nms) (Entered: 02/01/2018)
02/02/2018	274	Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding D&M's letter request for reconsideration (D.I. 271). (Attachments: # 1 Exhibits 1-3)(Rovner, Philip) Modified on 2/5/2018 (nms). (Entered: 02/02/2018)
02/02/2018	275	Letter to The Honorable Richard G. Andrews, from Michael Flynn, regarding Sonos February 2, 2018 Letter (D.I. 274). (Attachments: # 1 Exhibits 1-3)(Flynn, Michael) Modified on 2/2/2018 (nms). (Entered: 02/02/2018)
02/02/2018	276	NOTICE of of Prior Art References Pursuant to 35 U.S.C. § 282 by Sonos Inc. (Rovner, Philip) (Entered: 02/02/2018)
02/02/2018	277	Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding response to D&M letter dated 2/2/18 (D.I. 275). (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 2/5/2018 (nms). (Entered: 02/02/2018)
02/03/2018	278	Official Transcript of Motions for Summary Judgment held on 01-30-18 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs, 302-573-6195 Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 2/26/2018. Redacted Transcript Deadline set for 3/6/2018. Release of Transcript Restriction set for 5/4/2018. (lad) (Entered: 02/03/2018)
02/05/2018	279	Amended Notice to Take Deposition of Michael Tate on February 7, 2018, filed by D&M Holdings Inc., D&M Holdings U.S. Inc..(Flynn, Michael) Modified on 2/6/2018 (nms). (Entered: 02/05/2018)
02/05/2018	280	[SEALED] Opening Brief on Supplemental Claim Construction, filed by Sonos Inc.. (Rovner, Philip) Modified on 2/6/2018 (nms). (Main Document 280 replaced on 2/7/2018) (nms). (Entered: 02/05/2018)
02/05/2018	281	[SEALED] DECLARATION of Philip A. Rovner re 280 Opening Brief on Supplemental Claim Construction, by Sonos Inc.. (Attachments: # 1 Exhibits A-F)(Rovner, Philip) Modified on 2/6/2018 (nms). (Entered: 02/05/2018)
02/06/2018	282	MEMORANDUM ORDER: The Motion to Strike (D.I. 187) is DENIED. Signed by Judge Richard G. Andrews on 2/6/2018. (nms) (Entered: 02/06/2018)
02/07/2018		CORRECTING ENTRY: The pdf for D.I. 280 has been replaced per counsel's request. (nms) (Entered: 02/07/2018)
02/07/2018	283	NOTICE to Take Deposition of Dr. Jay Kesan on February 9, 2018 filed by Sonos Inc..(Rovner, Philip) (Entered: 02/07/2018)
02/08/2018	284	ORAL ORDER: The Pretrial Conference set for 2/23/2018, will now start at 9:30 AM in Courtroom 6A. Ordered by Judge Richard G. Andrews on 2/8/2018. (nms) (Entered: 02/08/2018)
02/09/2018	285	

LINKPLAY EXHIBIT 1004
Page 149 of 4822

		[SEALED] Responsive Supplemental Claim Construction Brief, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 2/12/2018 (nms). (Entered: 02/09/2018)
02/09/2018	286	[SEALED] DECLARATION of John M. Jackson re 285 Responsive Supplemental Claim Construction Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits A-L)(Flynn, Michael) Modified on 2/12/2018 (nms). (Entered: 02/09/2018)
02/12/2018	287	NOTICE of Supplemental Authority, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibit A)(Flynn, Michael) Modified on 2/12/2018 (nms). (Entered: 02/12/2018)
02/12/2018	288	Response to 287 Notice of Supplemental Authority, by Sonos Inc.. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 2/13/2018 (nms). (Entered: 02/12/2018)
02/12/2018	289	REDACTED VERSION of 280 Opening Brief on Supplemental Claim Construction, by Sonos Inc.. (Rovner, Philip) Modified on 2/13/2018 (nms). (Entered: 02/12/2018)
02/12/2018	290	REDACTED VERSION of 281 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-F)(Rovner, Philip) Modified on 2/13/2018 (nms). (Entered: 02/12/2018)
02/13/2018	291	[SEALED] REPLY Brief on Supplemental Claim Construction, filed by Sonos Inc.. (Rovner, Philip) Modified on 2/14/2018 (nms). (Entered: 02/13/2018)
02/13/2018	292	[SEALED] DECLARATION of Philip A. Rovner re 291 Reply Brief on Supplemental Claim Construction, by Sonos Inc.. (Attachments: # 1 Exhibits G-J)(Rovner, Philip) Modified on 2/14/2018 (nms). (Entered: 02/13/2018)
02/14/2018	293	NOTICE OF SERVICE of Supplemental Reply Expert Report of Andrew Wolfe regarding the Invalidity of U.S. Patent No. 7,734,850 filed by Sonos Inc..(Rovner, Philip) (Entered: 02/14/2018)
02/15/2018	294	Supplemental Surreply Claim Construction Brief, filed by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 2/20/2018 (nms). (Entered: 02/15/2018)
02/15/2018	295	[SEALED] DECLARATION of John M. Jackson re 294 Supplemental Surreply Claim Construction Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits M-P)(Flynn, Michael) Modified on 2/20/2018 (nms). (Entered: 02/15/2018)
02/16/2018	296	MEMORANDUM OPINION re 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899. Signed by Judge Richard G. Andrews on 2/16/2018. (ksr,) (Entered: 02/16/2018)
02/16/2018	297	ORDER GRANTING 186 MOTION for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899. Signed by Judge Richard G. Andrews on 2/16/2018. (ksr,) Modified on 2/20/2018 (nms). (Entered: 02/16/2018)
02/16/2018	298	REDACTED VERSION of 285 Claim Construction Answering Brief by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 02/16/2018)
02/16/2018	299	REDACTED VERSION of 286 Declaration by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 02/16/2018)
02/20/2018	300	AMENDED MEMORANDUM OPINION regarding Motion for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899 (D.I. 186). Signed by Judge Richard G. Andrews on 2/20/2018. (nms) (Entered: 02/20/2018)
02/20/2018	301	Joint Proposed Pretrial Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits A-H-2)(Flynn, Michael) Modified on 2/21/2018 (nms). (Main Document 301 replaced on

LINKPLAY EXHIBIT 1004
Page 150 of 4822

		2/22/2018) (nms). (Attachment 1 replaced on 2/22/2018) (nms). (Entered: 02/20/2018)
02/20/2018	302	Proposed Voir Dire by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) (Entered: 02/20/2018)
02/20/2018	303	VERDICT SHEET by D&M Holdings Inc., D&M Holdings U.S. Inc. . (Flynn, Michael) (Entered: 02/20/2018)
02/20/2018	304	Proposed Jury Instructions by D&M Holdings Inc., D&M Holdings U.S. Inc. . (Flynn, Michael) (Entered: 02/20/2018)
02/20/2018	305	REDACTED VERSION of 291 Reply Brief on Supplemental Claim Construction, by Sonos Inc.. (Rovner, Philip) Modified on 2/21/2018 (nms). (Entered: 02/20/2018)
02/20/2018	306	REDACTED VERSION of 292 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits G-J)(Rovner, Philip) Modified on 2/21/2018 (nms). (Entered: 02/20/2018)
02/22/2018		CORRECTING ENTRY: The main pdf for D.I. 301 has been replaced per counsel's request. The signature block on the cover page has been amended. (nms) (Entered: 02/22/2018)
02/22/2018	307	REDACTED VERSION of 295 Declaration by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits M-P)(Flynn, Michael) (Entered: 02/22/2018)
02/22/2018		CORRECTING ENTRY: The pdf for the exhibits found at D.I. 301 has been replaced per counsel's request. (nms) (Entered: 02/22/2018)
02/22/2018	308	ORDER ON MOTIONS IN LIMINE. Signed by Judge Richard G. Andrews on 2/22/2018. (nms) (Entered: 02/22/2018)
02/22/2018	309	MEMORANDUM OPINION regarding Defendant's Motions for Summary Judgment (D.I. 177 , D.I. 186 , D.I. 193 , and D.I. 191) and claim construction issues. Within three days the parties shall submit a proposed order consistent with this Memorandum Opinion. Signed by Judge Richard G. Andrews on 2/22/2018. (nms) (Entered: 02/22/2018)
02/23/2018	310	Voir Dire Questions. (nms) (Entered: 02/23/2018)
02/23/2018		Minute Entry for proceedings held before Judge Richard G. Andrews - Final Pretrial Conference held on 2/23/2018. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 02/23/2018)
02/23/2018	311	ORAL ORDER: The trial scheduled for March 5, 2018, is CONTINUED to a date to be set after further consultation with counsel.. Ordered by Judge Richard G. Andrews on 2/23/2018. (ksr,) (Entered: 02/23/2018)
02/25/2018	312	Official Transcript of Pretrial Conference held on 02-23-18 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 3/19/2018. Redacted Transcript Deadline set for 3/28/2018. Release of Transcript Restriction set for 5/29/2018. (lad) (Entered: 02/25/2018)
02/26/2018	313	[SEALED] Letter to The Honorable Richard G. Andrews from Michael Flynn regarding the Court's February 22, 2018 Order Regarding Sonos's Motion in Limine # 3 - re 308 Order. (Flynn, Michael) (Entered: 02/26/2018)
02/26/2018	314	[SEALED] DECLARATION of John M. Jackson re 313 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 1-12)(Flynn, Michael) Modified on 2/27/2018 (nms). (Entered: 02/26/2018)
02/26/2018	315	[SEALED] Letter to The Honorable Richard G. Andrews, from Michael Flynn, regarding the Court's February 22, 2018 Order (D.I. 308). (Attachments: # 1 Exhibits A1-A68, part 1, # 2 Exhibits A1-A68, part 2, #

LINKPLAY EXHIBIT 1004
Page 151 of 4822

		3 Exhibits A1-A68, part 3)(Flynn, Michael) Modified on 2/27/2018 (nms). (Entered: 02/26/2018)
02/27/2018	316	PROPOSED Supplemental Claim Construction Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 2/28/2018 (nms). (Entered: 02/27/2018)
02/27/2018	317	[SEALED] Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding Disputed Documents regarding Sonos's Motion in Limine No. 1. (Flynn, Michael) (Entered: 02/27/2018)
02/27/2018	318	[SEALED] DECLARATION of John M. Jackson re 317 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Attachments: # 1 Exhibits 1-6)(Flynn, Michael) Modified on 2/28/2018 (nms). (Entered: 02/27/2018)
02/27/2018	319	[SEALED] Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding response to D&M's February 26, 2018 (D.I. 313). (Attachments: # 1 Exhibits A-D)(Rovner, Philip) Modified on 2/28/2018 (nms). (Entered: 02/27/2018)
02/28/2018	320	SUPPLEMENTAL CLAIM CONSTRUCTION ORDER. Signed by Judge Richard G. Andrews on 2/28/2018. (nms) (Entered: 02/28/2018)
02/28/2018	321	Letter to The Honorable Richard G. Andrews from Michael Flynn regarding the Court's February 22, 2018 Order Regarding Sonos's Motion in Limine # 3. (Flynn, Michael) (Entered: 02/28/2018)
02/28/2018	322	[SEALED] Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding response to D&M's February 27, 2018 letter - re 317 Letter. (Rovner, Philip) (Entered: 02/28/2018)
03/05/2018	323	REDACTED VERSION of 313 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 3/6/2018 (nms). (Entered: 03/05/2018)
03/05/2018	324	REDACTED VERSION of 314 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 3/6/2018 (nms). (Entered: 03/05/2018)
03/05/2018	325	REDACTED VERSION of 315 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 3/6/2018 (nms). (Entered: 03/05/2018)
03/05/2018	326	REDACTED VERSION of 317 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 3/6/2018 (nms). (Entered: 03/05/2018)
03/05/2018	327	REDACTED VERSION of 318 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 3/6/2018 (nms). (Entered: 03/05/2018)
03/06/2018	328	REDACTED VERSION of 319 Letter, by Sonos Inc.. (Attachments: # 1 Exhibits A-D)(Rovner, Philip) Modified on 3/7/2018 (nms). (Entered: 03/06/2018)
03/08/2018	329	REDACTED VERSION of 322 Letter by Sonos Inc.. (Rovner, Philip) (Entered: 03/08/2018)
04/03/2018	330	ORAL ORDER: A Telephone Conference is set for 6/8/2018, at 11:30 AM before Judge Richard G. Andrews to discuss a new trial date to be set. The parties shall mutually coordinate the call to chambers. Ordered by Judge Richard G. Andrews on 4/3/2018. (nms) (Entered: 04/03/2018)
05/18/2018	331	STIPULATION of Dismissal and Modification of Protective Order, by D&M Holdings Inc., D&M Holdings U.S. Inc.. (Flynn, Michael) Modified on 5/21/2018 (nms). (Entered: 05/18/2018)
05/21/2018	332	SO ORDERED Granting 331 Stipulation of Dismissal (***Civil Case Terminated). Signed by Judge Richard G. Andrews on 5/21/2018. (nms) (Entered: 05/21/2018)

LINKPLAY EXHIBIT 1004
Page 152 of 4822

05/24/2018	333	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) 7,343,435 B2; 6,539,210 B1; 7,305,694 B2; 6,469,633 B1; 8,755,667 B2; 6,473,441 B1; 7,734,850 B2; 7,995,899 B2; 7,987,294 B2. (Attachments: # 1 Order)(nms) (Entered: 05/24/2018)

Copyright © 2018 LexisNexis CourtLink, Inc. All rights reserved.
*** THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY ***

Objects

9213357 or 9,213,357

All authorities

LINKPLAY EXHIBIT 1004
Page 154 of 4822

5 records found out of 123,172,330 searched

Publications Families

Publication number	Publication date	Title
WO2016149455A2	09/22/2016	THE RNA INTERACTOME OF POLYCOMB COMPLEX 1 (PRC1)
US9213357B2	12/15/2015	Obtaining content from remote source for pla
DE9213357U1	02/04/1993	Double flywheel with sealed inner space.
WO9213357A1	08/06/1992	GYROTRON WITH RADIAL BEAM EXTRAC
GB9213357D0	08/05/1992	PEDAL ACTUATOR

1

Privacy Policy (https://www.lexisnexis.com/en-us/terms/privacy-policy.page) |
Cookie Policy (https://www.lexisnexis.com/global/privacy/privacy-cookies/?gid=1658&locale=en_gb)

LINKPLAY EXHIBIT 1004
Page 155 of 4822

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

Secondary Materials (1) Sort by: Relevance

1. CW001 ALI-ABA 535

THE ART OF MAKING A GIFT OR A SALE TO A TRUST OF A DIFFICULT TO VALUE ASSET THAT LIMITS ADDITIONAL GIFT TAX LIABILITY Goldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kindGoldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind

By S. Stacy Eastland, ALI CLE COURSE OF STUDY MATERIALS

... Year 8 9,012,543 180,251 450,627 - 279,327 - Year 9 **9,213,357** 184,267 460,668 - 295,593 - Year 10 9,415,617 188,312 470,781 ... ... 8,812,917 Year 7 (238,810) (441,376) 9,012,543 Year 8 (245,975) (463,416) **9,213,357** Year 9 (253,354) (484,914) 9,415,617 Year 10 (260,955) (506,275) 10,381,800 ...

Content
CLE Course of Study Materials
Jurisdiction
Non-jurisdictional
Date
Jul 01, 2014

Content type:
Secondary Materials
Terms:
9213357 or 9,213,357
Search Type:
Boolean - Fewer Results
Narrow By:
None
Date and Time:
Oct 15, 2018 05:50:59 a.m. EDT

LINKPLAY EXHIBIT 1004
Page 156 of 4822

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group®

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

News (9) Sort by: Relevance

1. U.S. Patents Awarded to Inventors in California (Dec. 16)

   Targeted News Service Dec 16, 2015 10776 words Targeted News Service Targeted News Service
   ... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,357**&RS=PN/**9,213,357**
   Written by Amal Ahmed; edited by Jaya Anand. *** Cisco ...
   ... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

2. No Headline In Original

   Diarios Oficiais - Brazil Dec 08, 2017 PAGINAS SEM CADERNO; Pg. 1 2224 words
   ... marco A63 de coordenada Norte (Y) 9.213.318,13 m, Este (X) 283.324,26 ...

3. Sonos Assigned Patent

   Targeted News Service Dec 16, 2015 124 words Targeted News Service
   ... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,357**&RS=PN/**9,213,357**
   Written by Amal Ahmed; edited by Jaya Anand. For more ...
   ... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

4. US District Court"s order in the case of SONOS, INC., Plaintiff, v. D&M HOLDINGS, INC. d/b/a THE D+M GROUP, D&M HOLDINGS U.S. INC., and DENON ELECTRONICS (USA), LLC, Defendants.

   US Official News Aug 11, 2017 3494 words
   ... 9,195,258 ("the '258 Patent"), 9,202,509 ("the '509 Patent"), and **9,213,357** ("the '357 Patent). The Court has considered the Parties' Supplemental ...

5. Undercarriage Replacement of Be1000-1 Hyd. Excavator Sr. No. G10116

   Tenders Monitor Africa-Asia Apr 19, 2018 130 words
   ... Date: 18-Apr-2018 01:00 PM Document : http://www.bidsinfo.com /adminexe/documents/-IN1~20180419-**9213357**.html...

LINKPLAY EXHIBIT 1004
Page 158 of 4822

6. Head Line: US Patent granted to Sonos, Inc (California) on December 15, 2015 titled as "Obtaining content from remote source for playback"

Plus Patent News Dec 16, 2015 188 words
... States Patent and Trademark Office has granted patent no. **9,213,357** on December 15, 2015, to Sonos, Inc (...

7. Colt Group S.A. Director/PDMR Shareholding

London Stock Exchange Aggregated Regulatory News Service (ARNS) Mar 28, 2013 960 words
... calculating percentage) **9. 213,357** ...

8. Weekly output, 1-million kWh

Platts Energy Business & Technology Jul 01, 1992 REGIONAL REPORT; Vol. 206, No. 7; Pg. 23
356 words
... Eng 2106 -3.1 52,146 +0.1 113,689 +0.3 Mid
Atlan. 7708 -3.3 179,304 -0.1 400,751 +1.4 Cent. Industrial 11,326 -8.6
268,092 -1.2 604,974 +1.7 West Central 4073 -10.7 93,101 -1.9 **213,357**
+0.8 Southeast 14,014 -0.9 300,173 +0.5 683,224 +1.6 South Cent.
8341 -1.1 166,594 -2.7 389,353 -0.5 Rocky Mt.
3136 +7.7 65,578 +4.1 148,283 +2.6 ...

9. Kontron Mikroelektronik

GlobalAdSource (German) Dec 12, 2008 27 words
... USD Media Type Print Country Germany Source MARKT & TECHNIK Product ...

Content type:
News
Terms:
9213357 or 9,213,357
Search Type:
Boolean - Fewer Results
Narrow By:
None
Date and Time:
Oct 15, 2018 05:51:32 a.m. EDT

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group™

Litigation Search Report CRU 3999

Reexam Control No. 90/013,959

TO: David England
Location: CRU
Art Unit: 3992
Date: October 15, 2018

U.S. Patent Number: 9,213,357

From: Patricia Martin
Paralegal Specialist
Location: CRU 3999
Phone: (571) 272-7705

Search Notes

1) I performed a search on the patent in Lexis Court Link for any open dockets or closed cases.

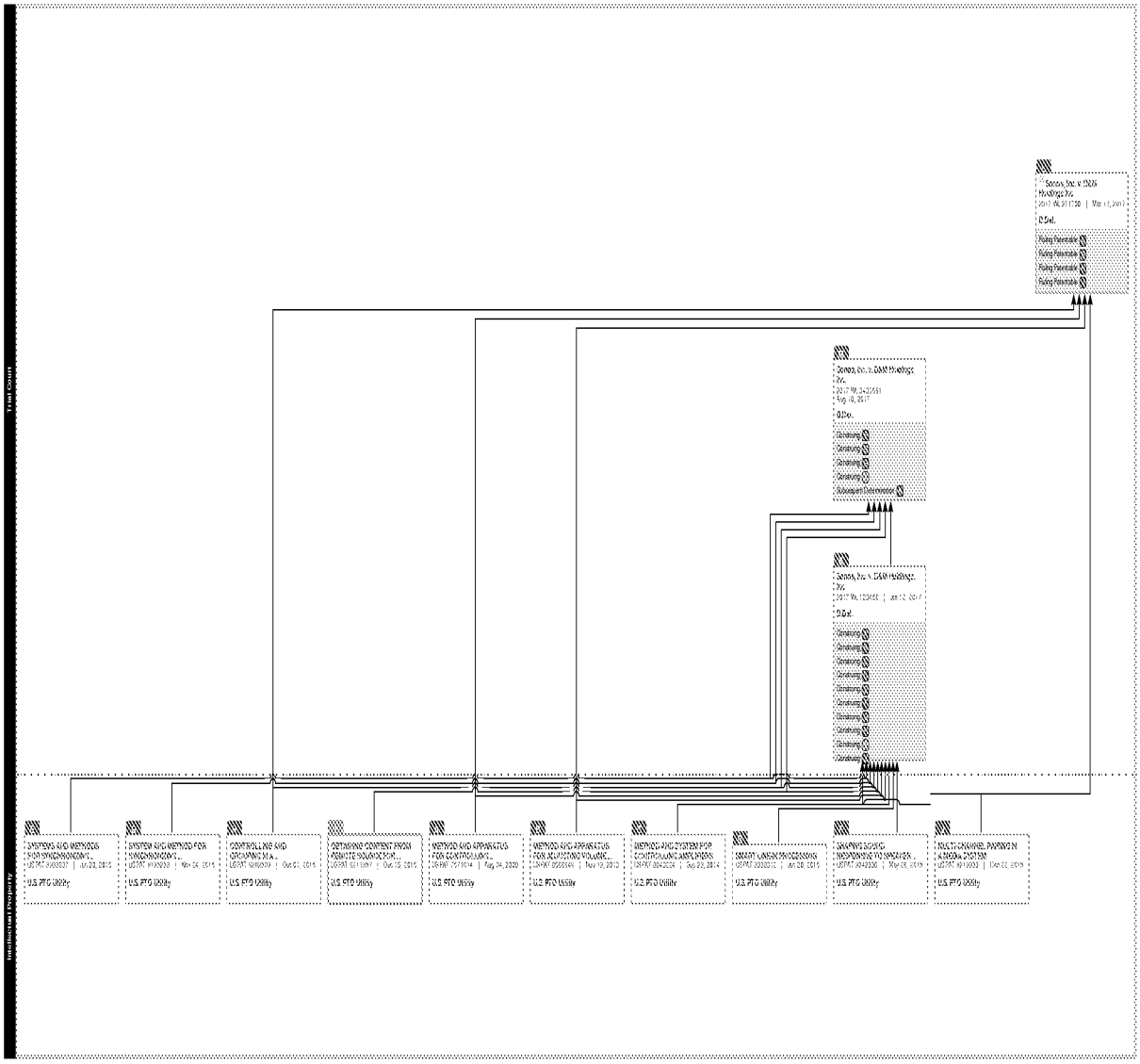
2) I performed a Key Cite Search in Westlaw, which retrieves all history on the patent including any litigation.

3) I performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.

4) I performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.

5) I performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

No Litigation was found



 © 2016 Thomson Reuters. No claim to original U.S. Government Works.

History (54)

Direct History (45)

1. METHOD AND APPARATUS FOR CONTROLLING MULTIMEDIA PLAYERS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 7571014 , U.S. PTO Utility , Aug. 04, 2009

Construed by

2. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

3. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

4. METHOD AND APPARATUS FOR CONTROLLING MULTIMEDIA PLAYERS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 7571014 , U.S. PTO Utility , Aug. 04, 2009

Ruled Patentable by

5. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

---

6. METHOD AND APPARATUS FOR ADJUSTING VOLUME LEVELS IN A MULTI-ZONE SYSTEM Out Of Pass
US PAT 8588949 , U.S. PTO Utility , Nov. 19, 2013

Construed by

7. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Subsequent Determination

8. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

9. METHOD AND APPARATUS FOR ADJUSTING VOLUME LEVELS IN A MULTI-ZONE SYSTEM Direct History
US PAT 8588949 , U.S. PTO Utility , Nov. 19, 2013

Ruled Patentable by

10. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

---

11. METHOD AND SYSTEM FOR CONTROLLING AMPLIFIERS Direct History
US PAT 8843224 , U.S. PTO Utility , Sep. 23, 2014

Construed by

12. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

13. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

14. SMART LINE-IN PROCESSING Direct History
US PAT 8938312 , U.S. PTO Utility , Jan. 20, 2015

Construed by

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

15. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

16. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

17. SYSTEMS AND METHODS FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES WITHOUT A VOLTAGE CONTROLLED CRYSTAL OSCILLATOR Out of Plan
US PAT 8938637 , U.S. PTO Utility , Jan. 20, 2015

Construed by

18. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

19. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

---

20. SYSTEMS AND METHODS FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES WITHOUT A VOLTAGE CONTROLLED CRYSTAL OSCILLATOR Out of Plan
US PAT 8938637 , U.S. PTO Utility , Jan. 20, 2015

Construed by

21. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

22. SHAPING SOUND RESPONSIVE TO SPEAKER ORIENTATION Out Of Plan
US PAT 9042556 , U.S. PTO Utility , May 26, 2015

Construed by

23. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

24. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

25. SYSTEM AND METHOD FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES Out Of Plan
US PAT 9195258 , U.S. PTO Utility , Nov. 24, 2015

Construed by

26. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

27. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

28. SYSTEM AND METHOD FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES Out Of Plan
US PAT 9195258 , U.S. PTO Utility , Nov. 24, 2015

Construed by

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

29. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

30. CONTROLLING AND GROUPING IN A MULTI-ZONE MEDIA SYSTEM Ov. Of Pat.
US PAT 9202509 , U.S. PTO Utility , Dec. 01, 2015

Construed by

31. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

32. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

33. CONTROLLING AND GROUPING IN A MULTI-ZONE MEDIA SYSTEM Ov. Of Pat.
US PAT 9202509 , U.S. PTO Utility , Dec. 01, 2015

Ruled Patentable by

34. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

AND Construed by

35. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

36. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK Ov. Of Pat.
US PAT 9213357 , U.S. PTO Utility , Dec. 15, 2015

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Construed by

37. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

38. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

39. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
US PAT 9213357 , U.S. PTO Utility , Dec. 15, 2015

Construed by

40. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

41. MULTI-CHANNEL PAIRING IN A MEDIA SYSTEM
US PAT 9219959 , U.S. PTO Utility , Dec. 22, 2015

Construed by

42. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 123456 , D.Del. , Jan. 12, 2017

Subsequent Determination

43. Sonos, Inc. v. D&M Holdings, Inc.
2017 WL 3433691 , D.Del. , Aug. 10, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

44. MULTI-CHANNEL PAIRING IN A MEDIA SYSTEM
US PAT 9219959 , U.S. PTO Utility , Dec. 22, 2015

Ruled Patentable by

45. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 971700 , D.Del. , Mar. 13, 2017

Related References (9)

46. Sonos, Inc. v. D & M Holdings Inc.
2015 WL 5277194 , D.Del. , Sep. 09, 2015

47. Sonos, Inc. v. D&M Holdings Inc.
2016 WL 4249493 , D.Del. , Aug. 10, 2016

Report and Recommendation Adopted by

48. Sonos Inc. v. D&M Holdings Inc.
2016 WL 4581078 , D.Del. , Sep. 01, 2016

49. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 476279 , D.Del. , Feb. 03, 2017

50. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 3669514 , D.Del. , Aug. 24, 2017

51. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 4969330 , D.Del. , Nov. 01, 2017

52. Sonos, Inc. v. D & M Holdings Inc.
297 F.Supp.3d 501 , D.Del. , Nov. 01, 2017

53. Sonos, Inc. v. D&M Holdings Inc.
2017 WL 5633204 , D.Del. , Nov. 21, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

54. Sonos, Inc. v. D & M Holdings Inc.
287 F.Supp.3d 533 , D.Del. , Dec. 07, 2017

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

LexisNexis® CourtLink®

Switch Client | My Briefcase | Order Runner Documents | Lexis Advance | Sign Out |
Welcome, Patricia Martin

Single Search - with Terms and Connectors

Enter keywords - Search multiple dockets & documents Search Info

My CourtLink | Search | Dockets & Documents | Track | Alert | Strategic Profiles | Breaking Complaints | My Account | Court Info

Search > Patent Search > Searching

Patent Search 9,213,357 10/15/2018

No cases found.

Return to Search

(Charges for search still apply)

LexisNexis® | About LexisNexis | Terms & Conditions | Pricing | Privacy | Customer Support - 1-888-311-1966 | Copyright © 2018 LexisNexis®. All rights reserved.

Objects

9213357 or 9,213,357

All authorities

LINKPLAY EXHIBIT 1004
Page 171 of 4822

5 records found out of 123,172,330 searched

Publications Families

Publication number	Publication date	Title
WO2016149455A2	09/22/2016	THE RNA INTERACTOME OF POLYCOMB COMPLEX 1 (PRC1)
US9213357B2	12/15/2015	Obtaining content from remote source for pla
DE9213357U1	02/04/1993	Double flywheel with sealed inner space.
WO9213357A1	08/06/1992	GYROTRON WITH RADIAL BEAM EXTRAC
GB9213357D0	08/05/1992	PEDAL ACTUATOR

1

Privacy Policy (https://www.lexisnexis.com/en-us/terms/privacy-policy.page) |
Cookie Policy (https://www.lexisnexis.com/global/privacy/privacy-cookies/?gid=1658&locale=en_gb)

LINKPLAY EXHIBIT 1004
Page 172 of 4822

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

Secondary Materials (1) Sort by: Relevance

1. CW001 ALI-ABA 535

THE ART OF MAKING A GIFT OR A SALE TO A TRUST OF A DIFFICULT TO VALUE ASSET THAT LIMITS ADDITIONAL GIFT TAX LIABILITY Goldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kindGoldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind

By S. Stacy Eastland, ALI CLE COURSE OF STUDY MATERIALS

... Year 8 9,012,543 180,251 450,627 - 279,327 - Year 9 **9,213,357** 184,267 460,668 - 295,593 - Year 10 9,415,617 188,312 470,781 ... ... 8,812,917 Year 7 (238,810) (441,376) 9,012,543 Year 8 (245,975) (463,416) **9,213,357** Year 9 (253,354) (484,914) 9,415,617 Year 10 (260,955) (506,275) 10,381,800 ...

Content
CLE Course of Study Materials
Jurisdiction
Non-jurisdictional
Date
Jul 01, 2014

Content type:
Secondary Materials
Terms:
9213357 or 9,213,357
Search Type:
Boolean - Fewer Results
Narrow By:
None
Date and Time:
Oct 15, 2018 05:50:59 a.m. EDT

LINKPLAY EXHIBIT 1004
Page 173 of 4822

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group®

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

News (9) Sort by: Relevance

1. U.S. Patents Awarded to Inventors in California (Dec. 16)

   Targeted News Service Dec 16, 2015 10776 words Targeted News Service Targeted News Service
   ... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,357**&RS=PN/**9,213,357**
   Written by Amal Ahmed; edited by Jaya Anand. *** Cisco ...
   ... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

2. No Headline In Original

   Diarios Oficiais - Brazil Dec 08, 2017 PAGINAS SEM CADERNO; Pg. 1 2224 words
   ... marco A63 de coordenada Norte (Y) 9.213.318,13 m, Este (X) 283.324,26 ...

3. Sonos Assigned Patent

   Targeted News Service Dec 16, 2015 124 words Targeted News Service
   ... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,357**&RS=PN/**9,213,357**
   Written by Amal Ahmed; edited by Jaya Anand. For more ...
   ... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

4. US District Court"s order in the case of SONOS, INC., Plaintiff, v. D&M HOLDINGS, INC. d/b/a THE D+M GROUP, D&M HOLDINGS U.S. INC., and DENON ELECTRONICS (USA), LLC, Defendants.

   US Official News Aug 11, 2017 3494 words
   ... 9,195,258 ("the '258 Patent"), 9,202,509 ("the '509 Patent"), and **9,213,357** ("the '357 Patent). The Court has considered the Parties' Supplemental ...

5. Undercarriage Replacement of Be1000-1 Hyd. Excavator Sr. No. G10116

   Tenders Monitor Africa-Asia Apr 19, 2018 130 words
   ... Date: 18-Apr-2018 01:00 PM Document : http://www.bidsinfo.com /adminexe/documents/-IN1~20180419-**9213357**.html...

LINKPLAY EXHIBIT 1004
Page 175 of 4822

6. Head Line: US Patent granted to Sonos, Inc (California) on December 15, 2015 titled as "Obtaining content from remote source for playback"

Plus Patent News Dec 16, 2015 188 words
... States Patent and Trademark Office has granted patent no. **9,213,357** on December 15, 2015, to Sonos, Inc (...

7. Colt Group S.A. Director/PDMR Shareholding

London Stock Exchange Aggregated Regulatory News Service (ARNS) Mar 28, 2013 960 words
... calculating percentage) **9. 213,357** ...

8. Weekly output, 1-million kWh

Platts Energy Business & Technology Jul 01, 1992 REGIONAL REPORT; Vol. 206, No. 7; Pg. 23
356 words
... Eng 2106 -3.1 52,146 +0.1 113,689 +0.3 Mid
Atlan. 7708 -3.3 179,304 -0.1 400,751 +1.4 Cent. Industrial 11,326 -8.6
268,092 -1.2 604,974 +1.7 West Central 4073 -10.7 93,101 -1.9 **213,357**
+0.8 Southeast 14,014 -0.9 300,173 +0.5 683,224 +1.6 South Cent.
8341 -1.1 166,594 -2.7 389,353 -0.5 Rocky Mt.
3136 +7.7 65,578 +4.1 148,283 +2.6 ...

9. Kontron Mikroelektronik

GlobalAdSource (German) Dec 12, 2008 27 words
... USD Media Type Print Country Germany Source MARKT & TECHNIK Product ...

Content type:
News
Terms:
9213357 or 9,213,357
Search Type:
Boolean - Fewer Results
Narrow By:
None
Date and Time:
Oct 15, 2018 05:51:32 a.m. EDT

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group™

LINKPLAY EXHIBIT 1004
Page 176 of 4822

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

APPEAL BRIEF

Jeffrey P. Armstrong
McDONNELL BOEHNEN
HULBERT & BERGHOFF LLP
300 South Wacker Drive
Chicago, Illinois 60606
(312) 913-0001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	
	)	

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPEAL BRIEF

This Appeal Brief is submitted pursuant 37 C.F.R. § 41.37, within two months from the Notice of Appeal filed on July 16, 2018. The Office is authorized to charge any underpayment or credit any overpayment in this matter to Deposit Account No. 13-2490.

TABLE OF CONTENTS

I. Real Party in Interest 1

II. Related Appeals and Interferences 1

III. Status of the Claims 1

IV. Summary of the Claimed Subject Matter, Cited Art, and Rejections 1

V. Argument 8

A. The Examiner has failed to establish a *prima facie* case of obviousness 9

1. The Examiner failed to explain *why* a POSITA would have combined Blank's media synch player, time server, and central control console into a single consolidated device 10

2. The Examiner failed to explain *how* the proposed combination of Blank's media synch player, time server, and central control console would work 16

3. The Examiner failed to establish a reasonable expectation of success with making the proposed combination 19

4. The Examiner failed to establish that it would have been *prima facie* obvious to modify Blank's devices to use features in Gray to practice the claimed invention 22

5. The Examiner failed to establish that it would have been *prima facie* obvious to further modify Blank and Gray with the APA 23

B. Strong objective evidence of non-obviousness weighs in favor of the patentability of the claimed invention..... 24

1. Competitors praised the patented synchronous Playback feature..... 27

2. Competitors copied Patentee's products embodying the patented synchronous playback feature..... 28

3. Competitors struggled and failed to implement synchronous playback functionality..... 29

VII. Conclusion..... 30

LINKPLAY EXHIBIT 1004
Page 180 of 4822

TABLE OF AUTHORITIES

Cases

Personal Web Technologies v. Apple,
848 F.3d 987 (Fed. Cir. 2017) ..... passim

ActiveVideo Networks v. Verizon Communications,
694 F.3d 1312 (Fed. Cir. 2012) 11, 13

Metalcraft v. Toro,
848 F.3d 1358 (Fed. Cir. 2017) 11

KSR v. Teleflex,
550 U.S. 398 (2007)..... 12

Belden v. Berk-Tek,
805 F.3d 1064 (Fed. Cir. 2015) 12

Polaris v. Arctic Cat,
882 F. 3d 1056 (Fed. Cir. 2018)..... 14

Cutsforth v. MotivePower,
636 Fed. Appx. 575 (Fed. Cir. 2016) 14

In re Rinkevich,
BPAI, 2007-1317 (Decided May 29, 2007)..... 22

Varian Medical v. William Beaumont Hospital,
IPR 2016-00162 (May 4, 2017)..... 24

WBIP, LLC v. Kohler Co.,
829 F.3d 1317 (Fed. Cir. 2016)..... passim

Iron Grip v. USA Sports,
392 F.3d 1317 (Fed. Cir. 2004)..... 26, 28

Statutes

35 U.S.C. § 103..... passim

I. Real Party in Interest

The real party in interest is Sonos, Inc.

II. Related Appeals and Interferences

Appellant is not aware of any related appeals or interferences.

III. Status of the Claims

Claims 9-12 and 19 are rejected under 35 U.S.C. § 103 based on U.S. Pub. 2004/0252400 ("Blank"), U.S. Pub. 2002/0150053 ("Gray"), and alleged Admitted Prior Art ("APA"); claims 9-12 and 19 are under appeal. A complete claim listing is set forth in the Claims Appendix.

IV. Summary of the Claimed Subject Matter, Cited Art, and Rejections

The claimed invention occurred during development of Sonos's multi-zone home audio system when the inventor was trying to synchronize playback of digital media content by multiple, independently-clocked playback devices connected over a data network. One challenge was that "[s]mall differences in the audio playback devices' start times and/or playback speeds can be perceived by a listener as an echo effect, and larger differences can be very annoying." '357 Pat., 2:12-14. The inventor recognized these "[d]ifferences can arise because [of] a number of reasons, including delays in the transfer of audio information over the network," and that "[s]uch delays can differ as among the various audio playback devices for a variety of reasons, including where they are connected into the network, message traffic and other reasons." *Id.* at 2:15-20. Another challenge was

"[w]hen an audio playback device converts the digital audio information from digital to analog form, it does so using a clock that provides timing information," and "[g]enerally, the audio playback devices that are being developed have independent clocks." *Id.* at 2:21-28. These independently-clocked playback devices did not "clock[] at precisely the same rate," and as a result, they could not play audio in synchrony with each other. *Id.*; Ex. A: Wolfe Dec. ¶ 26.

To overcome these challenges, the '357 Patent describes a new approach for synchronizing audio playback by a group of independently-clocked playback devices connected over a data network. In operation, one playback device in the group (a "master") is tasked with performing a specific combination of technical functions on behalf of the group to facilitate synchronous playback between the "master" playback device and every other playback device in the group (referred to as "slave" playback devices). '357 Pat., 7:51-8:11.

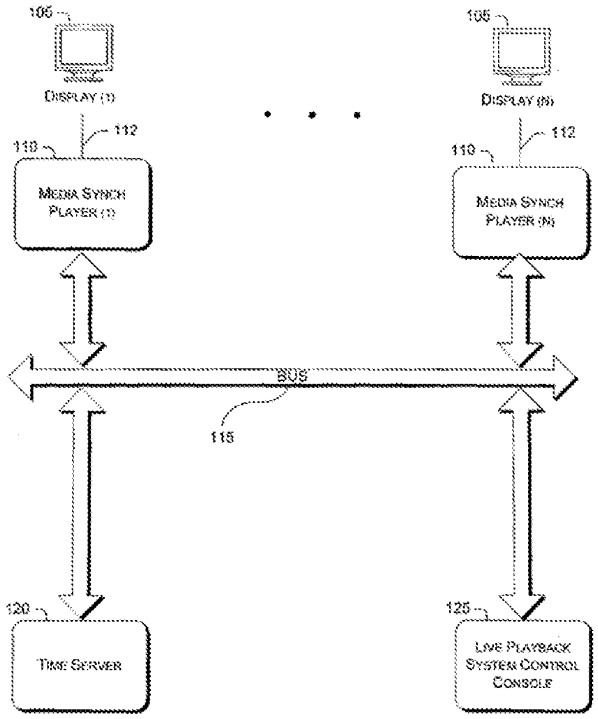
Claim 9 recites such an independently-clocked "first playback device" configured to perform the specific combination of "master" playback device functions to synchronize audio playback with an independently-clocked "second playback device" over a data network. The recited "master" playback device functions include: (i) "receiv[ing]…control information" from a networked controller device that identifies "audio information" available from a network-accessible audio source that is to be played back by the first and second playback

devices; (ii) "obtain[ing]…the audio information" to be played back by the first and second playback devices from the network-accessible audio source; (iii) "transmit[ing]… device clock information of the first playback device" to the independently-clocked "second playback device" over the data network; (iv) "transmit[ing]…the audio information" to the independently-clocked "second playback device" over the data network; (v) "transmit[ing]…playback timing information associated with the audio information" to the independently-clocked "second playback device" over the data network; and (vi) "play[ing] back the audio information in synchrony with the [independently-clocked] second playback device by using the playback timing information associated with the audio information and the device clock information…to play back the audio information." This claimed combination of features enables a group of independently-clocked playback devices connected over an asynchronous data network to play back audio in synchrony without the need for any additional hardware, such as a dedicated or central time server. '357 Pat., 31:30-44.

Notably, tasking a single playback device in a group of independently-clocked playback devices with the responsibility for executing all of these "master" functions on behalf of the group to facilitate synchronous playback by the playback devices in the group – and thereby eliminating the need for additional, dedicated hardware to execute one or more of these functions – was a significant departure

from prior art systems at the time of the invention. This departure is illustrated by comparing the claimed invention to the system in Blank cited by the Examiner.

Blank discloses a system for synchronizing playback by multiple "media synch players" that are connected via a bus or other type of network. Blank, ¶¶ 22-23, 29. This system is illustrated in FIG. 1 of Blank, shown below:



In Blank's system, each "media synch player" 110 is a dedicated playback device configured to play back media content. However, there is no single device in Blank's system that is configured to perform the claimed combination of "master" playback device functions, i.e., distributing device clock time information, audio information, and playback timing information to other playback devices to facilitate synchronous playback. Rather, Blank's system requires two additional

hardware devices to facilitate synchronous playback by Blank's separate media synch players, because Blank's separate media synch players do not perform the combination of inventive "master" playback device functions of the inventive "playback device" recited in the claims.

First, Blank requires a dedicated "time server" 120 that serves as the clock time master for all the devices in Blank's system. Every device in Blank's system must synchronize its internal clock to the clock time and phase/frequency of the dedicated "time server." Blank, ¶¶ 44, 48. This is distinctly different from the claimed invention, which eliminates the need for a dedicated time server by providing a new type of independently-clocked playback device that is configured to distribute its "device clock time information" to another independently-clocked playback device and thereby compensate for clock time differences between the independently-clocked playback devices. '357 Pat., 11:47-58, 22:65-23:19.

Second, Blank also requires a dedicated "central control console" 125 synchronized to the dedicated "time server." The "central control console" transmits "control signals" to each of the "media synch players," including a "start time t+d for the media synch players 110 to start providing content from media files" stored at the "media synch players." Blank, ¶ 29. Again, this is distinctly different from the claimed invention, which eliminates the need for a "central control console" synchronized to a dedicated "time server" by providing a new

type of independently-clocked playback device that is configured to distribute "playback timing information associated with the audio information" to another playback device to enable the playback devices to play back the audio information in synchrony together.[1] '357 Pat., 11:47-58, 22:65-23:19.

Despite the significant technical differences between the claimed invention and Blank, the § 103 rejection is premised on the Examiner's contention that it would have been trivial for a Person of Ordinary Skill in the Art (POSITA) to combine Blank's separate media synch player, dedicated time server, and dedicated control console together into a single playback device that is configured to perform the combination of "master" playback device functions of the claimed invention. Final Office Action (FOA), pp. 6-12, 15-25. However, this contention is erroneous for several reasons.

First, the Examiner fails to identify any rational reason ***why*** a POSITA would have been motivated to combine Blank's separate, dedicated devices into a single "master" playback device. Second, the Examiner fails to explain ***how*** the proposed combination of Blank's separate, dedicated devices would actually work. Indeed, the Examiner's proposed combination would introduce multiple complex

[1] A further distinction between Blank and the claimed invention is that the first playback device obtains audio information from an audio source on behalf of the second playback device and then distributes the audio information to the second playback device (along with the playback timing information), whereas each "media synch player" in Blank's system separately obtains media files.

inter-component and inter-playback device interactions and conflicts that are neither contemplated by Blank nor addressed by the Examiner. And third, the Examiner improperly dismissed facts that contradict his conclusory assertion that combining and modifying Blank's devices would have been trivial. Advisory Action (AA), p. 2. The record contains substantial evidence showing that experienced engineers nearly a decade *after* the invention were both (i) unsure of how to replicate Patentee's system for synchronizing audio playback by independently-clocked playback devices over a data network and (ii) unable to implement the claimed invention without substantial engineering effort.

The § 103 rejection also relies on the Gray reference, which describes distributing media across multiple heterogeneous networks, such as wide area networks (WANs). Gray uses a special network gateway 331 at each inter-WAN boundary to emulate a constant delay network over the multiple WANs. Each network gateway interprets (and when appropriate, modifies) time stamps in each multimedia packet and then forwards the packet to the next WAN based on the time stamps. Gray, ¶¶ 6, 59, 63-70, Fig. 6; Ex. A: Wolfe Dec., ¶¶ 45-46.

As with Blank, there is no dispute that Gray fails to disclose a single independently-clocked playback device configured to perform the claimed combination of "master" functions to synchronize audio playback with another independently-clocked playback device over a data network. Rather, the Examiner

contends that if the "playback timing" element is a time stamp, then a POSITA could further modify the proposed combination of Blank's devices to use Gray's "frame-specific time stamps" as playback timing for synchronous playback. FOA, pp. 15-25. The Examiner's reliance on Gray is flawed for several reasons.

As an initial matter, the Examiner's reliance on Gray fails to overcome the Examiner's initial failures to explain ***why*** a POSITA would have combined Blank's separate devices into a single device configured to perform all the claimed "master" playback device functions and ***how*** the proposed combination would work. The Examiner also fails to identify any rational reason ***why*** a POSITA would have further modified the proposed combination of Blank's devices to use Gray's "frame-specific time stamps" as playback timing for synchronous playback, particularly when Blank already discloses a satisfactory playback timing solution, albeit a different solution than recited in the claims. Ex. A: Wolfe Dec., ¶ 57.

Finally, the Examiner contends that if Blank and Gray fail to teach or suggest the recited "playback timing" or "independently clocked" elements, then a POSITA could modify the proposed combination of Blank (or Blank and Gray) with the alleged APA to practice the claims. FOA, pp. 21-25. But the Examiner's reliance on the alleged APA misstates the alleged APA and fails to overcome the deficiencies of the proposed combination of Blank (or Blank and Gray).

V. ARGUMENT

The § 103 rejection is clearly erroneous and should be withdrawn for at least

the reasons that: (A) the Examiner has failed to establish that claims 9-12 and 19 would have been *prima facie* obvious in view of Blank, Gray, and the APA; and (B) strong objective evidence of non-obviousness weighs in favor of patentability.

A. The Examiner has failed to establish a *prima facie* case of obviousness

As discussed above, claim 9 is directed to an independently-clocked "first playback device" that is configured to perform a specific combination of "master" playback device functions to synchronize audio playback with an independently-clocked "second playback device" over a data network. It is undisputed that neither Blank nor Gray disclose a single playback device that is configured to perform the recited combination of specific "master" functions. Instead, the Examiner's § 103 rejection relies on a combination of disparate functions performed by four distinct devices in Blank and Gray: Blank's media synch player (which is merely configured to play back media content), Blank's dedicated time server, Blank's dedicated control console, and Gray's network gateway.

Despite these clear distinctions, the Examiner rejected the claims under § 103, asserting that a POSITA could (i) combine Blank's separate media synch player, dedicated time server, and dedicated control console into a single consolidated "playback device" that is configured to perform the recited combination of "master" functions for synchronizing audio playback, (ii) further modify the consolidated device to use Gray's network gateway's "frame-specific

time stamps" as playback timing for synchronizing audio playback, and/or (iii) use a network of personal computers (PCs) to implement all the capabilities recited in the claims. FOA, pp. 6-12, 15-25. However, the bases for the Examiner's § 103 rejections are erroneous for at least the following reasons.

1. The Examiner failed to explain *why* a POSITA would have combined Blank's media synch player, time server, and central control console into a single consolidated device

The Examiner contends a POSITA could combine Blank's separate media synch player, dedicated time server, and dedicated control console together into a new type of playback device that is configured to perform the recited combination of "master" playback device functions for synchronizing audio playback. Importantly, this proposed combination is the foundation on which the entire § 103 rejection rests because all of the Examiner's proffered alternatives rely on further modifications of this foundational combination. FOA, pp. 6-12, 15-25. However, the Examiner failed to explain ***why*** a POSITA would have combined Blank's media synch player, time server, and control console into a single "playback device" and configure that proposed device to perform the combination of "master" playback device functions recited in the claims. This failure is a fatal flaw of the § 103 rejection.

Indeed, to support a legal conclusion of obviousness, the Examiner must show that (i) the prior art discloses or suggests all the elements recited in the claim and (ii) a POSITA at the time of the invention ***would have been motivated*** to

modify or combine the prior art to arrive at the claimed invention with a reasonable expectation of success in doing so. *Personal Web Technologies v. Apple*, 848 F.3d 987, 991 (Fed. Cir. 2017); *ActiveVideo Networks v. Verizon Communications*, 694 F.3d 1312, 1327 (Fed. Cir. 2012). "In determining whether there would have been a motivation to combine prior art references to arrive at the claimed invention, it is insufficient to simply conclude the combination would have been obvious without identifying any reason ***why*** a [POSITA] ***would have made the combination***." *Metalcraft v. Toro*, 848 F.3d 1358, 1366 (Fed. Cir. 2017) (emphasis added).

For example, the Federal Circuit in *ActiveVideo* affirmed a district court's judgement of nonobviousness even though the prior art disclosed all the claim limitations because the patent challenger's expert failed to articulate any rational motivation to combine the prior art elements in the manner recited in the claims. 694 F.3d at 1327-29. The expert explained, (i) the prior art "components…are modular, and when I add one, it doesn't change the way the other one works," (ii) combining and modifying the prior art components "would yield a predictable result," and (iii) "[t]he motivation to combine would be…to build something better,…more efficient, cheaper…." *Id.* at 1327-28. Nevertheless, the Federal Circuit affirmed the judgment of nonobviousness because the "expert testimony regarding the motivation to combine …fail[ed] to explain ***why*** a [POSITA] ***would have combined*** elements from specific references in the way the claimed invention

does" and thus, the proffered motivation to modify and combine the teachings of the prior art was "fraught with hindsight bias." *Id.* at 1328-29 (emphasis added) (citing *KSR v. Teleflex*, 550 U.S. 398, 418 (2007)).

Similarly, in *Personal Web*, the Federal Circuit reversed an obviousness judgment by the Patent Trial and Appeal Board in part because there was insufficient evidence in the record that a POSITA "would have been motivated to combine [the prior art] in the way [the patent-at-issue] claim[ed] and reasonably expected success." 848 F.3d at 993. The Federal Circuit concluded that the Board "seem[ed] to say no more than a skilled artisan, once presented with the two references, would have understood that they ***could be*** combined…[a]nd that is ***not enough*** [because] it does not imply a motivation to pick out those two references and combine them to arrive at the claimed invention." *Id.* at 993-94 (emphasis original) (citing *Belden v. Berk-Tek*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) ("[O]bviousness concerns whether a skilled artisan not only ***could have made*** but ***would have been motivated to make*** the combinations or modifications of prior art to arrive at the claimed invention.") (emphasis original)).

Here, the Examiner contends that "the time server 120 ***could*** be located on a first media synch player 110, and ***could*** provide the master clock that is used to provide the playback timing information," the "control console 125 ***can*** also be implemented on a media synch player 110 with time server 120, and ***can*** be used

to provide playback timing information to other media synch players 110," or a PC could implement the claimed functions. FOA, pp. 18-21 (emphasis added). The Examiner suggests the combination would be an "obvious engineering choice," the combination "would have yielded a predictable results…at the time of the invention" and "[t]he devices would not perform any other unexpected function other than what they are programed to do and do not require undue experimentation to determine other different results." FOA, pp. 6-7, 19.

But like the deficient reasoning in *Personal Web* and *ActiveVideo*, the Examiner's conclusory statements fail to explain ***why*** a POSITA ***would*** have modified Blank's system to arrive at a single, consolidated "playback device" configured to perform the combination of "master" playback device functions in the same way as recited in the claims. Indeed, the Examiner fails to identify any rational basis for his contention that it would have been trivial to combine Blank's separate, dedicated devices together into a single "master" playback device, and there is no support in Blank for such a combination. For instance, Blank never suggests any approach for synchronizing playback by media synch players that does not rely on a dedicated time server and a dedicated control console, and Blank also never suggests that a "media synch player" may be tasked with any additional responsibilities beyond what would be expected of a typical playback device – let alone the specific combination of functions recited in the claims.

Instead of identifying any rational underpinning, the Examiner's proposed combination of the disparate devices in Blank is exclusively premised on "what a skilled artisan would have been ***able*** to do, rather than what a skilled artisan would have been ***motivated*** to do at the time of the invention" – a rationale the Federal Circuit has consistently found improper. *Polaris v. Arctic Cat*, 882 F. 3d 1056, 1068-69 (Fed. Cir. 2018) (emphasis original). Likewise, the Federal Circuit has explained that "[m]erely stating that a particular placement of an element is a design choice does not make it obvious," yet this is exactly what the Examiner has done here. *Cutsforth v. MotivePower*, 636 Fed. Appx. 575, 578 (Fed. Cir. 2016) (vacating the Board's obviousness decision where there was no explanation ***why*** a POSITA would have made the proffered design choice, noting that "conclusory statements do not give adequate justification for why a claim is obvious"). For these reasons alone, the Examiner failed to satisfy his burden of establishing *prima facie* obviousness.

When the Patentee identified these deficiencies, the Examiner responded, "[t]his type of computer combination is performed all the time" and as an example, alleged that:

> [A] system could have an email server, printer server, web server, or other types of servers as separate machines scattered in a network or combine these servers into one server or 'box' and the functions of those separate sever[s] would not be any different, the only difference would be the location of the servers.

FOA, p. 7. However, the Examiner's hypothetical email, printer, and web servers are distinctly different devices with distinctly different functions compared to Blank's devices or the claimed "playback device," and thus the Examiner's hypothetical combination of email, printer, and web servers is irrelevant to ***why*** a POSITA would have been motivated to combine ***Blank's*** devices into a single device and then modify that device to perform the combination of functions recited in the claims. Further, the Examiner's server analogy is inapt because the functions performed by an email, printer, and web server are unrelated to each other so those separate servers can be easily combined without altering each server's individual functions, whereas here, the functions performed by Blank's media synch player, time server, and control console are highly interrelated and thus, combining the separate devices into "one box" creates multiple technical conflicts that do not arise when combining an email, printer, and web server into "one box" as proposed. Sec. V(A)(2), *infra*.

The Examiner must identify a rational motivation for why a POSITA would have modified Blank's devices in the alleged manner. He failed to do so. Because the Examiner has failed to identify any rational reason ***why*** a POSITA at the time of the invention would have been motivated to combine Blank's components into a single, consolidated "playback device" and then modify that device to perform the combination of "master" functions recited in the claims for synchronizing audio

playback, the Examiner has failed to establish a *prima facie* case of obviousness for at least this first, independent reason.

2. The Examiner failed to explain ***how* the proposed combination of Blank's media synch player, time server, and central control console would work**

Not only did the Examiner fail to explain ***why*** a POSITA would have been motivated to combine Blank's devices into a single, consolidated "playback device," the Examiner also failed to explain ***how*** the proposed combination of Blank's media synch player, time server, and control console would work.

Indeed, in reversing the Board's obviousness judgment in *Personal Web*, the Federal Circuit also found that the Board "nowhere clearly explained, or cited evidence showing, ***how*** the combination of references was supposed to work," and that "a clear, evidence-supported account of the contemplated workings of the combination is a prerequisite to adequately explaining and supporting a conclusion that a [POSITA] would have been motivated to make the combination and reasonably expect[ed] success in doing so." *Id.* at 994 (emphasis original). *Personal Web*, 848 F.3d at 994 (emphasis in original).

Here, the Examiner contends that if Blank's media synch player, dedicated time server, and dedicated control console were to be combined to create a "playback device" as recited in the claims, these disparate devices in Blank "would not perform any other unexpected function other than what they are programed to do" and "there is no difference in how the components interact with one another."

FOA, pp. 6-9, 19-20. That is not true.

Combining Blank's discrete media synch player, time server, and control console devices to create the claimed "playback device" introduces multiple complex inter-component and inter-playback device interactions and technical conflicts that are not contemplated by Blank or explained by the Examiner. The claims recite a "first playback device" and a "second playback device." And neither Blank or nor the Examiner explain how a system with a "first playback device" and a "second playback device" each made from Blank's media synch player, time server, and control console would work.

For instance, as discussed above, a foundational premise of Blank's system is that "[a]ll of the elements synchronize their internal clocks to the [dedicated] time server." Blank, ¶ 44. The Examiner's proposed combination would change this foundational premise by including a time server in the "first playback device" and a time server in "the second playback device," rather than relying on a single, dedicated time server for the entire system. However, the Examiner fails to explain how synchronization in Blank's system would work subsequent to this change.[2]

[2] For example, the Examiner fails to explain whether the media synch player component of the first playback device would synchronize its internal clock to (i) the first playback device's time server component, or (ii) the second playback device's time server component. The Examiner also fails to explain whether the control console component of the first playback device would synchronize its internal clock to (i) the first playback device's time server component, or (ii) the second playback device's time server component. Nor does the Examiner explain how to resolve synchronization conflicts that arise when media synch player

Similarly, as discussed above, another foundational premise of Blank's system is that the media synch players in the system are all controlled by a dedicated control console. Blank, ¶ 29. The Examiner's proposed combination would change this foundational premise by including a control console in the "first playback device" and a control console in "the second playback device," rather than relying on a single, dedicated control console for the system. However, the Examiner fails to explain how control signaling in Blank's system would work subsequent to this change.[3]

Further still, the Examiner fails to explain how combining Blank's media synch player, dedicated time server, and dedicated control console devices into a single "playback device" results in a system where one "playback device" is configured to obtain audio information from an audio source and then ***transmit the audio information*** to another "playback device." Indeed, even if the Examiner's proposed hypothetical "playback device" could be built, the Examiner fails to explain which of the media synch player, time server, and control console

---

components and/or control console components of different consolidated playback devices synchronize their clocks to different time server components of different consolidated playback devices.

[3] For example, the Examiner fails to explain whether the media synch player component of the first playback device would be controlled via control signaling from (i) the first playback device's control console component, or (ii) the second playback device's control console component. Nor does the Examiner explain how to resolve control signaling conflicts that would arise when media synch player components of different consolidated devices receive control signaling from different control console components of different consolidated devices.

components of the "first playback device" would transmit audio information to the "second playback device" or which of those components would receive and process the audio information from the "first playback device." This is not surprising, because Blank fails to disclose ***any*** transmission of audio information between a media synch player, dedicated time server, or dedicated control console.

In view of the complexity of the technology at issue and the unresolved technical questions raised by the proposed combination, the Examiner's assertion that "there is no difference in how the components interact with one another" is incorrect. Under Federal Circuit precedent, the Examiner was required to provide a clear, evidence-supported account of ***how*** Blank's system would work after making the proposed combinations of and modifications to Blank's devices. He failed to do so. Thus, similar to *Personal Web*, the Examiner has failed to establish a *prima facie* case of obviousness for at least this second, independent reason.

3. The Examiner failed to establish a reasonable expectation of success with making the proposed combination

As discussed above, yet another fundamental requirement of any § 103 rejection is a showing that a POSITA at the time of the invention would have been motivated to modify or combine the prior art to arrive at the claimed invention with a ***reasonable expectation of success*** in doing so. *Personal Web*, 848 F.3d at 991. However, the Examiner's contention that there would have been a reasonable expectation of success for the proposed combination is purely conclusory. FOA,

pp. 7-9 (contending that the proposed combination would not require undue experimentation, "would not make an overly complicated device," and "making devices integral is not only well known in the art…but would have lead to a reasonable expectation of success").

In fact, the Examiner's conclusory contention is directly contrary to evidence produced by the third-party requestor, D&M, who was found liable for willfully infringing Sonos's patents. This evidence showed that building a device to perform the combination of claimed "master" playback device functions required a great deal of experimentation and was a very complex engineering undertaking.

For instance, D&M estimated in 2012, that it needed to spend $5.33M and invest 439 man-months (70,240 man-hours at a 40-hour work week) over 20 months to copy Sonos's media playback system embodying the claimed invention. Ex. B: PTX 198 at D+M_0161242. D&M's engineering plan allocated ***128 man-months (20,480 hours)*** of the total development effort just to the patented synchronous playback feature. Ex. C: PTX 200 at D+M_0161268.

Indeed, even with the benefit of having Sonos products to copy and Sonos patent filings to follow, D&M engineers still could not figure out how to implement synchronous audio playback nearly a decade after the date of invention. In 2011, a D&M engineer reviewing Sonos patent filings stated, "***Sonos has***

excellent synchronous playback feature." Ex. D: PTX 270, p. 2 (emphasis added). And in 2012, a D&M engineer asked, "***Do we have any idea how they can synchronize so perfectly?***" Ex. E: PTX 146 at D+M0072389 (emphasis added). Another D&M engineer replied, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used in both of network driver and audio driver…though ***it's only a guess***." *Id.* (emphasis added).

D&M's engineers are unquestionably persons of ordinary skill in the art, and many are arguably experts in the field. But even though D&M had Sonos patent filings and Sonos products to reverse-engineer, copying Sonos's products took D&M's engineers a great deal of effort and experimentation as late as 2012-14 -- nearly a decade after the 2004 date of invention. And if using Sonos patent filings as a guide to copy Sonos products was that complex and challenging for a team of experienced engineers nearly a decade after the time of the claimed invention, then combining Blank's media synch player, time server, and control console into a single, consolidated "playback device" without the benefit of a commercial product to copy and detailed instructions in a patent specification certainly would not have been a trivial task in 2004 as the Examiner contends.[4] Because the Examiner has failed to show that a POSITA would have had a reasonable expectation of success, the Examiner has failed to establish a *prima facie* case of obviousness for at least

[4] As discussed further below, the Examiner failed to properly consider this objective evidence contradicting the Examiner's conclusory allegation that combining Blank's separate, dedicated devices would have been trivial.

this third independent reason.

4. The Examiner failed to establish that it would have been *prima facie* obvious to modify Blank's devices to use features in Gray to practice the claimed invention

The Examiner next contends that, if the "playback timing" element is a time stamp, then a POSITA could further modify the proposed combination of Blank's separate media synch player, dedicated time server, and dedicated control console to use the "frame-specific time stamps" of Gray's network gateways as playback timing for synchronous playback. FOA, pp. 15-25. But the addition of Gray does not overcome the Examiner's failure to establish that it would have been obvious to combine Blank's separate devices in the first instance. Sec. V(A)(1), *supra*.

Moreover, the Examiner fails to identify any rational reason ***why*** a POSITA would have been motivated to further modify the proposed combination of Blank's devices to use the "frame-specific time stamps" of Gray's network gateways as playback timing for synchronous playback, particularly when Blank already discloses a satisfactory playback timing solution for synchronous playback, albeit a different solution than what is recited in the claims. Ex. A: Wolfe Dec., ¶ 57.

A POSITA having common sense would not look to a second reference to solve a problem already solved by a first reference. *In re Rinkevich*, BPAI, 2007-1317 (Decided May 29, 2007), p. 9. Even though Blank's playback timing solution differs from the claimed invention, Blank nevertheless has a viable playback timing solution, and thus, "a [POSITA] having common sense at the time of the

invention would not have reasonably looked to [Gray] to solve a problem already solved by [Blank]." *Rinkevich*, BPAI, 2007-1317 at 9. Thus, the Examiner has failed to establish that it would have been *prima facie* obvious to further modify the proposed combination of Blank's devices with Gray to cure Blank's deficiencies.

5. The Examiner failed to establish that it would have been *prima facie* obvious to further modify Blank and Gray with the APA

The Examiner contends that, if Blank and Gray fail to teach or suggest the "playback timing" or "independently clocked" elements, then a POSITA could modify the proposed combination of Blank (or Blank and Gray) with the alleged APA to practice the claims. FOA, pp. 21-25. But the addition of the APA does not overcome the Examiner's failure in the first instance to establish that it would have been *prima facie* obvious to (i) combine Blank's time server, control console, and media synch player, and/or (ii) modify the proposed combination of Blank's devices to use the "frame-specific time stamps" of Gray's network gateway as playback timing for synchronous playback. Secs. V(A)(1)-(2), *supra*.

Importantly, the Examiner's contention that the "APA discloses that playback devices can remain independently clocked during synchronous playback" directly contradicts the APA. The APA explains that "[g]enerally, the audio playback devices that are being developed have independent clocks, and, if they are not clocking at precisely the same rate, the audio playback provided by the

various devices can get out of synchronization." '357 Pat., 2:24-28. Thus, contrary to the Examiner's contention, the alleged APA teaches that prior art independently-clocked playback devices could *not* play audio in synchrony because they did not reliably clock at precisely the same rate. Ex. A: Wolfe Dec., ¶ 26.

Because the Examiner's contention that a POSITA could have modified Blank and Gray with the APA to satisfy the "playback timing" and "independently clocked" features contradicts the APA and does not otherwise cure the deficiencies of Blank and Gray, the Examiner has failed to establish that it would have been *prima facie* obvious to modify Blank and Gray with the alleged APA to practice the claimed invention.

B. Strong objective evidence of non-obviousness weighs in favor of the patentability of the claimed invention

It is well established that "[n]otwithstanding what the teachings of the prior art would have suggested to [a POSITA] at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art." *Varian Medical v. William Beaumont Hospital*, IPR 2016-00162, pp. 31, 64 (May 4, 2017) (affirming patentability where the prior art disclosed all the claim elements because objective evidence of non-obviousness outweighed evidence that a POSITA would have been motivated to combine the prior art with a reasonable expectation of success); *WBIP, LLC v. Kohler Co.*, 829

F.3d 1317, 1326-1337 (Fed. Cir. 2016) (same). To be afforded weight in the obviousness analysis, objective evidence of non-obviousness must have a nexus to the claimed invention, but there is a presumption of nexus for objective evidence when the patentee shows the objective evidence is tied to a specific product that embodies the claimed invention. *WBIP*, 829 F.3d at 1329 (citations omitted).

Here, there is substantial objective evidence of non-obviousness of the '357 Patent's claimed invention. Notably, this same objective evidence of non-obviousness was recently presented during a trial regarding the infringement and validity of related patents directed to Patentee's technology for synchronizing playback between independently-clocked playback devices, and the jury upheld the validity of the related patents based in part on this objective evidence. Ex. F: Jury Verdict, p. 5. Nevertheless, the Examiner dismissed this same evidence as lacking a nexus and therefore insufficient to overcome the § 103 rejection. AA, p. 2. However, the Examiner's dismissal is legally erroneous for at least two reasons.

First, the Examiner improperly conflated commercial success with competitor praise, competitor copying, and competitor failures when dismissing the objective evidence of non-obviousness on grounds that the Patentee did not "establish a nexus between the claimed invention and the commercial success." AA, p. 2. However, Patentee presented evidence of competitor praise, competitor copying, and competitor failure – not ***commercial success***. As such, any alleged

lack of nexus between the claimed invention and commercial success is irrelevant to the evidence of competitor praise, copying, and failure, and thus, the Examiner's dismissal was legally improper for at least this first reason.

Second, the Examiner applied an incorrect legal standard for evidence of copying when concluding that the evidence fails to show "how D&M attempted to use ***the specific claim language*** to copy a Sonos product." AA, p. 2 (emphasis added). Contrary to the Examiner's incorrect statement of the law, it is well established that "copying requires the ***replication of a specific product***," which "may be demonstrated either through internal documents" and/or by manufacture of a product having "substantial similarity to, the patented product ***(as opposed to the patent)***." *Iron Grip v. USA Sports*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (emphasis added).[5] The evidence presented below clearly shows that D&M (the third-party requester) copied Patentee's products embodying the patented technology for synchronizing playback between independently-clocked playback devices. Thus, the Examiner's dismissal of the copying evidence was legally improper for this additional reason.

Moreover, the substantial objective evidence of non-obviousness outlined below strongly supports the non-obviousness of the claimed invention.

---

[5] The copying inquiry focuses on copying a ***product*** rather than copying a ***patent*** because a product embodying a patented invention is often available in the market many years before a patent covering the product ever issues. Indeed, products are marked "patent pending" for this very reason.

1. Competitors praised the patented synchronous playback feature

"Industry participants, especially competitors, are not likely to praise an obvious advance over the known art. Thus, if there is evidence of industry praise in the record, it weighs in favor of the nonobviousness of the claimed invention." *WBIP*, 829 F.3d at 1334. Here, Patentee's competitor, D&M, praised the patented synchronous playback feature.

For example, in a D&M technical report from 2011 reviewing Sonos patent filings, a D&M engineer stated, "***Sonos has excellent synchronous playback feature***." Ex. D: PTX 270, p. 2 (emphasis added).[6] Additionally, in a D&M email from 2012 discussing Sonos's synchronous playback capabilities, a D&M engineer stated, "***it's amazing accuracy over [an] IP network***." Ex. E: PTX 146 at D+M0072389 (emphasis added). In another 2012 D&M email, a D&M engineer stated, "I have had Sonos in my home since 2005. I think ***their synchronization is the best I've ever heard***." Ex. G: PTX 193 at D+M_0158702 (emphasis added). And a 2010 presentation given by D&M's Chief Technical Officer summarizes the features of the Sonos system, stating, "Each zone can ***play the same music*** or different music and music playback in all 32 zones can be ***perfectly synchronized***," and states, "every Sonos Zone can act like bridge, a switch, a wireless repeater, ***a***

[6] Ex. D has a nexus to the patented synchronous playback feature because the praise refers to the synchronous playback feature disclosed and described in Patentee's patents and published patent applications in the family of related applications including the '357 patent.

synchronized source and a synchronized player" and "***it is virtually impossible to hook to it up 'wrong'.***" Ex. H: PTX 275 at D+M_0408322-30 (emphasis added).[7]

2. Competitors copied Patentee's products embodying the patented synchronous playback feature

"The fact that a competitor copied technology suggests it would not have been obvious." *WBIP,* 829 F.3d at 1336 (emphasis added). In the context of nonobviousness, "copying requires the ***replication of a specific product***," which "may be demonstrated either through internal documents" and/or by manufacture of a product having "substantial similarity to, the patented product ***(as opposed to the patent)***." *Iron Grip*, 392 F.3d at 1325 (emphasis added).

Here, the evidence shows D&M was aware of, had access to, and copied Sonos products embodying the claimed synchronous playback feature. For example, a 2013 D&M strategy presentation identifies "Step 1" of "How to Win" is to "***Make Sonos-copy products***." Ex. I: PTX 180 at D+M_0129410 (emphasis added). A 2012 D&M email outlining D&M's plan to copy Sonos products states, "[W]e recently completed a ***detailed analysis of the Sonos product line and features***. Ichikawa-san sent you the summary presentation of the ***Sonos teardown***. Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached.

[7] Exs. E, G, and H have a nexus to the claimed synchronous playback feature because the praise refers to the synchronous playback capability of actual Sonos products that practice the feature.

The summary of the plan is 20 months, 439 man-months, and $5.33M," or 70,240 hours based on a 40-hour work week. Ex. B: PTX 198 at D+M_0161242 (emphasis added). D&M's plan allocated 128 man-months (20,480 hours) to copying the patented synchronous playback feature. Ex. C: PTX 200 at D+M_0161268.[8] Additionally, the jury verdict from the related litigation found D&M liable for willful infringement of Sonos patents. Ex. F: Verdict at pp. 1-4.[9]

3. Competitors struggled and failed to implement synchronous playback functionality

Failure of others to achieve the results of the claimed invention is evidence of non-obviousness. See, e.g., *WBIP*, 829 F.3d at 1332 (citations omitted). Here, Sonos's competitors -- including D&M and other companies -- tried and failed to develop playback devices that could play back content in synchrony together.

For example, in a 2012 email discussing Sonos's synchronous playback capabilities, a D&M engineer asked, "***Do we have any idea how they can synchronize so perfectly?***" Another D&M engineer replied, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used

[8] The evidence of copying in Exs. I, B, and C has a nexus to the claimed synchronous playback feature because all Sonos playback devices practice the claimed synchronous playback feature, and thus, the evidence shows both access to and copying of a specific product that embodies the claimed invention.

[9] The jury's finding of willful infringement has a nexus to the claimed synchronous playback feature because (i) the Jury's verdict of willful infringement was based on the evidence presented at trial showing D&M copied Sonos playback devices, and (ii) all Sonos playback devices practice the claimed synchronous playback feature. Ex. J: Jury Instructions at pp. 10-11.

in both of network driver and audio driver…, though ***it's only a guess***." Ex. E: PTX 146 at D+M0072389 (emphasis added). Also, a 2010 D&M presentation given by D&M's Chief Technology Officer states, "Sonos has been ***the only successful multi-zone home audio*** solution marketed to consumers (as opposed to custom installation). ***Offerings from Logitech, Cisco and Yamaha have failed***." Ex. H: PTX 275 at D+M 0408332 (emphasis added). And a 2013 D&M competitive research presentation on the PURE Jongo Wireless Audio System described the system as having "***poor audio synchronization***." Ex. K: PTX 179 at D+M_0128194 (emphasis added). **"*[I]t made me dizzy***. I wonder if the engineering team has actually calculated the phase differential? ***It sounds to me like it is drifting continuously back and forth***." *Id.* at D+M0128159 (emphasis added).[10]

VII. CONCLUSION

For the foregoing reasons, Appellant submits that the claim rejections should be reversed and that patentability of the claims should be confirmed.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: September 17, 2018

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

[10] This evidence of failure in Exs. E, H, and K has a nexus to the claimed synchronous playback feature because it shows that others struggled and failed to deliver a "multi-zone home audio system" with synchronous playback, a defining feature of multi-zone audio systems.

CLAIMS APPENDIX

1. (Original) A method comprising:

receiving, by a first playback device from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information (i) obtaining, by the first playback device from the audio information source outside of the LAN, the audio information; (ii) transmitting, by the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) playing back, by the first playback device, the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

LINKPLAY EXHIBIT 1004
Page 212 of 4822

2. (Original) The method of claim 1, further comprising:

after receiving the control information, additionally (i) generating, by the first playback device, the playback timing information associated with the audio information; and (ii) generating, by the first playback device, the device clock information of the first playback device.

3. (Original) The method of claim 1, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

4. (Original) The method of claim 3, wherein the first and second playback devices are members of a synchrony group, and wherein the method further comprises:

transmitting, by the first playback device to the network device, status information that comprises a status of the synchrony group.

5. (Original) The method of claim 4, wherein the status information further comprises an identification of each playback device in the synchrony group.

6. (Original) The method of claim 5, wherein the status information further comprises an identification of a master playback device of the synchrony group.

7. (Original) The method of claim 6, wherein the first playback device is the master playback device of the synchrony group.

8. (Original) A tangible non-transitory computer-readable medium having instructions stored thereon that, when executed, cause a first playback device to:

receive, from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, from the audio information source outside of the LAN, the audio information; (ii) transmit, to a second playback device, the audio information, playback timing information associated with the audio information, and clock time information for the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the clock time information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

9. (Original) A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to

play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

10. (Original) The first playback device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

generate the playback timing information associated with the audio information; and generate the device clock information of the first playback device.

11. (Original) The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

12. (Original) The first playback device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

transmit, to the network device, status information that comprises a status of the synchrony group.

13. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of each playback device in the synchrony group.

14. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of a master playback device of the synchrony group.

15. (Original) The first playback device of claim 14, wherein the first playback device is the master playback device of the synchrony group.

16. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of one or more slave playback devices in the synchrony group, and wherein the second playback device is one of the one or more slave playback devices in the synchrony group.

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

generate a plurality of frames, wherein an individual frame comprises at least a portion of the audio information and the playback timing information associated with the audio information, and wherein the first playback device transmitting to the second playback device the audio information, playback timing

information, and device clock information of the first playback device comprises transmitting the plurality of frames to the second playback device.

18. (Original) The first playback device of claim 9, wherein the audio information comprises one of audio files or packetized streaming audio information.

19. (Original) The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.

20. (Original) The first playback device of claim 9, wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises sending, to the audio information source, a request for the audio information.

LINKPLAY EXHIBIT 1004
Page 218 of 4822

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the Appeal Brief with Exhibits A-K filed at the U.S. Patent Office on September 17, 2018, is being served via Federal Express upon the following third-party requestor:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: September 17, 2018 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

Electronic Acknowledgement Receipt	
EFS ID:	33745344
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	17-SEP-2018
Filing Date:	16-JUN-2017
Time Stamp:	17:52:49
Application Type:	Reexam (Third Party)

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	Appeal Brief Filed	04-0401-REEXAM_Appeal_Brief_with_Exhibits_A-K.pdf	24764805 eef77a350a6f091b082df6e6e671ad9eafee0de6	no	239
Warnings:					

The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
2	Reexam Certificate of Service	04-0401-REEXAM_Certificate_of_Service.pdf	78246 b2043751d246d1be4a3200a9be37b41869645079	no	1
Warnings:					
Information:					
			Total Files Size (in bytes):	24843051	

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/31 (03-14)
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.

NOTICE OF APPEAL FROM THE EXAMINER TO THE PATENT TRIAL AND APPEAL BOARD

Docket Number (Optional): 04-0401-REEXAM (14-1800-REX)

I hereby certify that this correspondence is being facsimile transmitted to the USPTO, EFS-Web transmitted to the USPTO, or deposited with the United States Postal Service with sufficient postage in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, on Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on _____.

Signature _____

Typed or printed name _____

In re Application of: U.S. Pat. 9,213,357

Application Number	Filed
90/013,959	June 16, 2017

For: Obtaining Content from Remote Source for Playback

Art Unit	Examiner
3992	David E. England

Applicant hereby **appeals** to the Patent Trial and Appeal Board from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1)) $ 800.00

☐ Applicant asserts small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by 50%, and the resulting fee is: $ _____

☐ Applicant certifies micro entity status. See 37 CFR 1.29. Therefore, the fee shown above is reduced by 75%, and the resulting fee is: $ _____
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 is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 13-2490.

☑ Payment made via EFS-Web.

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/AIA/22 or equivalent) is enclosed.
For extensions of time in reexamination proceedings, see 37 CFR 1.550.

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

☑ attorney or agent of record
Registration number 54,967

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

Signature /Jeffrey P. Armstrong/

Typed or printed name Jeffrey P. Armstrong

Telephone Number 312-913-0001

Date July 16, 2018

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 41.20(b)(1) and 41.31. 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, 1.14 and 41.6. 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.

Electronic Patent Application Fee Transmittal

Application Number:	90013959
Filing Date:	16-Jun-2017
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Filer:	Jeffrey Armstrong
Attorney Docket Number:	04-0401-REEXAM (14-1800-R

Filed as Large Entity

Filing Fees for ex parte reexam

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
NOTICE OF APPEAL	1401	1	800	800
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
		Total in USD ($)		**800**

Electronic Acknowledgement Receipt	
EFS ID:	33184131
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	16-JUL-2018
Filing Date:	16-JUN-2017
Time Stamp:	12:27:01
Application Type:	Reexam (Patent Owner)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$800
RAM confirmation Number	071618INTEFSW12275000
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	Notice of Appeal Filed	04-0401-REEXAM_Notice_of_Appeal.pdf	163424 2c84bc29576dd8cf5fa03c8dfba17b2b16f9fbc7	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30276 3762926eec86a6e0996bfa677be15e1aa28b508e	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	193700		

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
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the Notice of Appeal filed at the U.S. Patent Office on July 16, 2018, is being served via Federal Express upon the following third-party requestor:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: July 16, 2018

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

Electronic Acknowledgement Receipt	
EFS ID:	33184361
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	16-JUL-2018
Filing Date:	16-JUN-2017
Time Stamp:	12:39:00
Application Type:	Reexam (Patent Owner)

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	Reexam Certificate of Service	04-0401-REEXAM_Certificate_of_Service.pdf	78245 b3ccf0b69c966bd98dbcfc399051f280f6cd6eb7	no	1

Warnings:

Information:	
Total Files Size (in bytes):	78245

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 06/11/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
06/11/2018	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.

Ex Parte Reexamination Advisory Action *Before the Filing of an Appeal Brief*	**Control No.** 90/013,959	**Patent Under Reexamination** 9213357	
	Examiner DAVID ENGLAND	**Art Unit** 3992	**AIA (First Inventor to File) Status** No

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

THE PROPOSED RESPONSE FILED *16 May 2018* FAILS TO OVERCOME ALL OF THE REJECTIONS IN THE FINAL REJECTION MAILED *16 March 2018*.

1. ☒ Unless a timely appeal is filed, or other appropriate action by the patent owner is taken to overcome all of the outstanding rejection(s), this prosecution of the present *ex parte* reexamination proceeding WILL BE TERMINATED and a Notice of Intent to Issue *Ex Parte* Reexamination Certificate will be mailed in due course. Any finally rejected claims, or claims objected to, will be CANCELLED.

   THE PERIOD FOR RESPONSE IS EXTENDED TO RUN *3* MONTHS FROM THE MAILING DATE OF THE FINAL REJECTION. Extensions of time are governed by 37 CFR 1.550(c).

NOTICE OF APPEAL

2. ☐ An Appeal Brief is due two months from the date of the Notice of Appeal filed on _____ to avoid dismissal of the appeal. See 37 CFR 41.37(a). Extensions of time are governed by 37 CFR 1.550(c). See 37 CFR 41.37(e).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final action, but prior to the date of filing a brief, will not be entered because:
   (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ They raise the issue of new matter (see NOTE below);
   (c) ☐ They are not deemed to place the proceeding in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____ (See 37 CFR 1.116 and 41.33(a)).
4. ☐ Patent owner's proposed response filed _____ has overcome the following rejection(s):_____
5. ☐ The proposed new or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
6. ☐ For purposes of appeal, the proposed amendment(s) a)☐ will not be entered, or b)☐ will be entered and an explanation of how the new or amended claim(s) would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) patentable and/or confirmed: _____
   Claim(s) objected to: _____
   Claim(s) rejected: _____
   Claim(s) not subject to reexamination: _____

AFFIDAVIT OR OTHER EVIDENCE

7. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because patent owner failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence fails to overcome all rejections under appeal and/or appellant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☒ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Attached paper*.
12. ☐ Note the attached Information Disclosure Statement(s), PTO/SB/08, Paper No(s) _____.
13. ☐ Other:_____.

/DAVID ENGLAND/ Primary Examiner, Art Unit 3992	Conferee: /r.g.f./ Primary Examiner, Art Unit 3992	/MF/

cc: Requester (if third party requester)

The request for reconsideration has been considered but does NOT place the application in condition for allowance because: Applicant argues much the same as was presented in the interview conducted on 05/09/2018, with regards to the time elements in Blank and Gray. More specifically, Applicant argues that the combination of the two references would not work since the time elements would be for different networks and Blank teaches using Gray's timestamping feature for synchronizing the internal clock of the media synch player 110 with a time server 120 and NOT as playback timing for synchronizing playback of media by multiple media synch player.
When considering the remarks of the Applicant, it would appear that the functions of Blank and Gray in combination would allow a user to sync media players in both isosynchronous network as found in Blank and synching devices in non-isosynchronous networks by converting them into isosynchronous as taught in Gray. Therefore, using the system to connect these networks would also allow the combination of Blank and Gray to reach devices on both types of networks. As previously stated in the interview, it would appear that the time element in the reference can be mutually exclusive to the function they would perform, i.e., Blanks use of time would be for devices in an isosynchronous network and the system determining that devices in a non-isosynchronous network would need to use the time and sync function of Gray. Furthermore, the rejection is set up in Two different scenarios in the instance that one reference may not teach all that is claimed. As stated previously, the combination of Blank and Gray would still be obvious as stated in the previous Office Action and also as stated above in which Blank and Gray can communicate with devices on both types of networks. Furthermore, the time elements in each tell the devices when to "render" the content in the multimedia packet, i.e., play the audio. Gray clearly states that their timestamp tells the device when to render the content in the packet, i.e., Gray ¶0078 et seq. Rejections stands.

As to Applicant's submission of evidence. As per the conversation in the interview conducted 05/09/2018, the Applicant's Attorney stated that they were not privileged to the evidence until after the response to Non-Final rejection. Applicant was also asked that they should ONLY submit the evidence they thought would overcome the rejection since, from what the Applicant's Attorney stated, there was a hundred plus pieces of evidence. The Examiner further stated that a 37 C.F.R. 1.116(e) showing would have to accompany the evidence AND how the evidence is linked to the claim language that is rejected.
Applicant has given a 37 C.F.R. 1.116(e) showing and this evidence is entered. However, as stated in MPEP 716.03(a), "In order to be commensurate in scope with the claims the commercial success MUST be due to claimed features, and not due to unclaimed features. An affidavit or declaration attributing commercial success to a product or process "constructed according to the disclosure and claims of [the] patent application" or other equivalent language does not establish a nexus between the claimed invention and the commercial success because there is no evidence that the product or process which has been sold corresponds to the claimed invention, or that whatever commercial success may have occurred is attributable to the product or process defined by the claims. Ex parte Standish, 10 USPQ2d 1454, 1458 (Bd. Pat. App. & Inter. 1988)." The description of the evidence and the evidence itself does not teach the limitations that are rejected or how D&M attempted to use the specific claim language to copy a Sonos product. The evidence does not overcome the rejection.
As stated by the Examiner in the interview, only the most pertinent evidence is needed if the Applicant felt it would overcome the rejection. Since the Applicant supplied the evidence they felt would best fit in overcoming the rejection, no other evidence would appear to be sufficient to overcome the rejection and will not be considered in further proceedings of the Ex-parte Reexamination since another 37 C.F.R. 1.116(e) showing have to be submitted, which would beg the question, “Why was this not presented in the after final?”. Therefore, all other 37 C.F.R. 1.116(e) showings would not be met.

OK TO ENTER: /D.E.E/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO THE FINAL OFFICE ACTION MAILED MARCH 16, 2018

Please consider the following Remarks submitted in response to the Final Office Action mailed on March 16, 2018 in the above-captioned reexamination.

A listing of the **PENDING CLAIMS** begin on page 2.

REMARKS begin on page 7.

Patentee authorizes the Office to charge any underpayment or credit any overpayment of fees in connection with the above-captioned reexamination to Deposit Account 13-2490.

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 05/16/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
05/16/2018	PAPER

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

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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	90/013,959	9213357	
	Examiner	Art Unit	
	DAVID ENGLAND	3992	

All participants (applicant, applicant's representative, PTO personnel):

(1) *DAVID ENGLAND*.

(2) *Michael Fuelling (SPRS)*.

(3) *Roland Foster(Primary)*.

(4) *Jeffrey Armstrong, Chris Butts(Attorneys)*.

Date of Interview: *09 May 2018*.

Type: ☐ Telephonic ☒ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☒ Yes ☐ No.
If Yes, brief description: *Exhibits from court case involving this patent. Also other*.

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: *9*.

Identification of prior art discussed: *Blank & Gray*.

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...)

See Continuation Sheet.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

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

☒ Attachment

/DAVID ENGLAND/ Primary Examiner, Art Unit 3992	/MF/

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Attorney Armstrong discussed the elements of the agenda that was submitted by the Patent Owner (PO). Firstly, Attorney Armstrong discussed the obviousness combination of Blank and Gray. Attorney Armstrong stated that the timing data from Blank is not the same as the timing information as Gray and therefore are not combinable. Examiner England stated that the different functions of the two combine references would use their time element to their specific function, i.e., when it comes to the specific function of synchronization, the reference that teaches that function would use their time information to perform the claimed function. Examiner England further stated that this argument could be expanded on by the PO and submitted since it would appear to be their best argument with regards to the prior art, i.e., if PO's argument could go into depth about the time element and find any evidence that both time elements from each reference would not make the references combinable in a way that has not been discussed before. Attorney Armstrong further went into the commercial success of the Patent and stated that this would result in the combination of references not being foreseen and difficult to achieve. SPRS Fuelling stated this information should have been provided in the last response since this information seemed to be available and it would be difficult to have a 1.116 showing as to why this evidence was not presented sooner. Lastly, Attorney Armstrong discussed the evidence that was not available in time, from the copending litigation, to the PO and now available to the PO and public. The evidence from the court case allegedly show how some party attempted to copy the patent. Attorney Armstrong further stated that there are court cases that show how copying the engineering of a patent is pertinent to the case and proves that it is not obvious since they were unsuccessful. Examiner England stated that this argument and evidence would have to be clarified and discussed in depth with the other court cases showing how "copying" a competitor would overcome the rejection.

Importantly, an in-depth time line as to when / why this information was unavailable / important to this case, would have to be submitted in the above-mentioned 1.116 showing, including but not limited to, an explanation as to why PO apparently declined to formally submit, via a proper after final submission, the attached, twenty-nine (29) exhibits, with a computer file size of ~47 MB, during the last half-year, namely, from around Nov. or Dec., 2017, until now.

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	90/013,959	9213357	
	Examiner	Art Unit	
	DAVID ENGLAND	3992	

All participants (applicant, applicant's representative, PTO personnel):

(1) *DAVID ENGLAND*.

(2) *Michael Fuelling (SPRS)*.

(3) *Roland Foster(Primary)*.

(4) *Jeffrey Armstrong, Chris Butts(Attorneys)*.

Date of Interview: *09 May 2018*.

Type: ☐ Telephonic ☒ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☒ Yes ☐ No.
If Yes, brief description: *Exhibits from court case involving this patent. Also other*.

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: *9*.

Identification of prior art discussed: *Blank & Gray*.

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...)

See Continuation Sheet.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

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

☒ Attachment

/DAVID ENGLAND/ Primary Examiner, Art Unit 3992	/MF/

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Attorney Armstrong discussed the elements of the agenda that was submitted by the Patent Owner (PO). Firstly, Attorney Armstrong discussed the obviousness combination of Blank and Gray. Attorney Armstrong stated that the timing data from Blank is not the same as the timing information as Gray and therefore are not combinable. Examiner England stated that the different functions of the two combine references would use their time element to their specific function, i.e., when it comes to the specific function of synchronization, the reference that teaches that function would use their time information to perform the claimed function. Examiner England further stated that this argument could be expanded on by the PO and submitted since it would appear to be their best argument with regards to the prior art, i.e., if PO's argument could go into depth about the time element and find any evidence that both time elements from each reference would not make the references combinable in a way that has not been discussed before. Attorney Armstrong further went into the commercial success of the Patent and stated that this would result in the combination of references not being foreseen and difficult to achieve. SPRS Fuelling stated this information should have been provided in the last response since this information seemed to be available and it would be difficult to have a 1.116 showing as to why this evidence was not presented sooner. Lastly, Attorney Armstrong discussed the evidence that was not available in time, from the copending litigation, to the PO and now available to the PO and public. The evidence from the court case allegedly show how some party attempted to copy the patent. Attorney Armstrong further stated that there are court cases that show how copying the engineering of a patent is pertinent to the case and proves that it is not obvious since they were unsuccessful. Examiner England stated that this argument and evidence would have to be clarified and discussed in depth with the other court cases showing how "copying" a competitor would overcome the rejection.

Importantly, an in-depth time line as to when / why this information was unavailable / important to this case, would have to be submitted in the above-mentioned 1.116 showing, including but not limited to, an explanation as to why PO apparently declined to formally submit, via a proper after final submission, the attached, twenty-nine (29) exhibits, with a computer file size of ~47 MB, during the last half-year, namely, from around Nov. or Dec., 2017, until now.

McDonnell Boehnen Hulbert & Berghoff
Law Offices

300 South Wacker Drive
Chicago, Illinois 60606-6709
www.mbhb.com

312-913-0001 phone
312-913-0002 fax

May 4, 2018

Via email: david.england@uspto.gov

Examiner David E. England
U.S. Patent & Trademark Office
P.O. Box 1450
Arlington, VA 22313-1450

RE: Interview Agenda for 90/013,959 (Sonos 04-0401-REEXAM; 14-1800-REX)

Examiner England:

Thank you for agreeing to interview the above-referenced case on Wednesday, May 9, 2018, at 10am Eastern / 9am Central. An agenda of topics is outlined below:

Agenda for the Examiner Interview

- Independent Claim 9
- The 35 U.S.C. § 103 rejections in the Final Office Action
- The technical references cited in the Final Office Action
    1. U.S. Pub. 2004/0252400 (Blank)
    2. U.S. Pub. 2002/0150053 (Gray)
    3. alleged Sonos admitted prior art (APA)
- Evidence of objective indicia of non-obviousness

Independent Claim 9

9. (Original) A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The § 103 Rejections

I. Evidence supporting the Office Action's contention that a person of skill in the art *would* have been motivated to modify and combine the components of Blank and Gray to arrive at the claimed invention

Patentee requests that the Office clarify the purported reasons for why a person of skill in the art at the time of the invention ***would*** have been motivated to modify and combine Blank and Gray in the manner proposed in the Office Action to arrive at the claimed invention. *InTouch Technologies v. VGO Communications, Inc.*, 751 F.3d 1327, 1351-52 (Fed. Cir. 2014) ("A reason for combining disparate prior art references is a critical component of an obviousness analysis" and "should be made explicit."); *ActiveVideo Networks, Inc. v. Verizon Communications, Inc.*, 694 F.3d 1312 (Fed. Cir. 2012).

In particular, the Office Action contends at least six proposed modifications to the teachings of the cited references could theoretically be made to create a hypothetical device that could perform the features recited in the claims. However, while the Office Action contends that various combinations of the references "could" or "can" be made, it is not clear from the Office Action why a person of ordinary skill in the art at the time of the invention ***would*** have made each of the modifications and combinations proposed in the Office Action to arrive at the claimed invention absent using Patentee's claims as a roadmap. *InTouch Technologies*, 751 F.3d at 1352 (reversing a finding of obviousness that was based on "conclusory references to [the expert's] belief that one of ordinary skill in the art ***could*** combine these references, not that they ***would*** have been motivated to do so.") (emphasis original); *ActiveVideo*, 694 F.3d 1312; *Ex Parte Hongwei Kong*, PTAB, 2013-009261 (Decided Oct. 22, 2015), p. 3 (reversing Examiner's § 103 rejection and "conclud[ing] the Examiner [had] pieced together individual elements from the prior art using only [applicant's] disclosure and claim as a roadmap, an exercise in impermissible hindsight.").

More specifically, the Office Action contends:

1. "the time server 120 [in Blank] ***could*** be located on a first media synch player 110 [in Blank], and ***could*** provide the master clock that is used to provide the playback timing information," Office Action, pp. 18-19 (emphasis added);
2. Blank's "control console 125 ***can*** also be implemented on [Blank's] media synch player 110 with [Blank's] time server 120, and ***can*** be used to provide playback timing information to other media synch players 110," Office Action, pp. 19-20;

3. assuming Blank's media synch player 110 was modified to distribute audio content and timing to other media synch players as suggested above, a "media synch player 110 [in Blank] that includes a time server 120 [in Blank] ***could*** include the time stamp [taught in Gray] into the multimedia packets of the audio data from media file 210," Office Action, p. 20(emphasis added);
4. "the media synch players 110 of Blank or the management system 212 of Gray…***could*** be implemented as PCs or in conjunction with PCs, and which ***can*** transmit audio information, playback timing information and clock information to another playback device for synchronous playback," Office Action, p. 21 (emphasis added);
5. "the first media synch player 110 ***can*** obtain the audio information and provide it to the second media synch player 110 using Windows file sharing, and ***can*** then provide playback timing information by either 1)…transmitting a play command… or 2) add time stamps to the media data packets…in accordance with the teachings of Gray," Office Action, p. 19 (emphasis added); and
6. "the media synch players 110 of Blank or the management system 212 [component of home entertainment system 210] of Gray…***could*** be implemented as PCs or in conjunction with PCs, and which ***can*** remain independently clocked during synchronous playback, at least because PCs contain multiple clocks that ***can*** be independent." Office Action, p. 24 (emphasis added).

Even assuming for the sake of argument that Blank and Gray ***could*** be modified and combined in the complex manner proposed in the Office Action to create a hypothetical consolidated device that performs all the features recited in the claims, Patentee respectfully requests that the Office clarify why a person of skill in the art at the time of the invention ***would*** have been motivated to make each of the proposed combinations and modifications in the manner proposed in the Office Action to arrive at the claimed invention, absent Patentee's claims a roadmap for the proposed modifications and combinations.

As for the purported motivations cited in the Office Action:

- The Office Action contends that "combination of the two devices would have yielded a predictable result." Office Action, p. 6. But that rationale fails to account for any reason why a person of skill in the art would have also ***modified*** the devices in the manner proposed in the Office Action to arrive at the claimed invention. The Office Action's contentions that the "combination of devices to create one device is not new to the art of computer networking" and that the "devices would not perform any other unexpected function other than what they are programmed to do," is contrary to the details set forth in rejection, which explains that the devices would need to be modified to perform the functions recited in the claims. Compare Office Action, pp. 7-9 with Office Action, pp. 18-24.

- The Office Action contends that the proposed combination and modification of the devices in Blank and Gray "do not require undue experimentation to determine other different results." Office Action, p. 8. With regard to undue experimentation, Patentee respectfully requests that the Office consider objective indicia of non-obviousness showing that:

- The third-party requestor's own internal documents from 2010 and 2013 state that many competitors in the industry tried and failed to implement media playback systems capable of synchronous playback. Ex. 1: PTX 275 at D+M_0408332 ("Offerings from Logitech, Cisco and Yamaha have failed."); Ex. 2: PTX 476 at SONDM000133546-47 ("Others Have Tried," listing "Bose, Samsung, Bluesound, Nuvo, and Korus," and stating that Sonos is the "One Brand [that] Dominates the Market!");
- In 2005, engineers from the renowned audio company Bang & Olufsen had been "***trying to solve the problem of synch for a while and are stuck***" and that "[t]heir measurements show [the Sonos system] never out of synch by more than 3ms." Bang & Olufsen asked whether Sonos would be willing to license its synchronous playback intellectual property. Ex. 3: PTX 490 at SONDM000140123-24 (emphasis added);
- In 2012, the third-party requestor estimated that it would need to spend $5.33M and invest 439 man-months (70,240 man-hours, assuming a 40-hour work week) over 20 months to copy Sonos's media playback system embodying the claimed invention. Ex. 4: PTX 198 at D+M_0161242 ("Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. ***The summary of the plan is 20 months, 439 man-months, and $5.33M***.") (emphasis added).
  - In the engineering project plan, D&M allocated about 30% of the total development effort just to synchronized playback, i.e., 128 man-months (20,480 hours) of the 439 man-month development effort. Ex. 5: PTX 200 at D+M_0161268.
- In 2014, after years of failing to develop synchronized playback on its own, D&M launched the Denon HEOS product (embodying the synchronous playback features recited in the claims). A 2014 product review of the HEOS system in Digital Trends states, "With HEOS, Denon appears to be making little effort to hide its mimicry of the popular [Sonos] system.... ***Eight years in the making***, Denon boasts its new lineup offers 'audiophile-level synchronization' which suggests highly tuned clocking for playback." Ex. 6: SONDM000033268-70 at SONDM000033268-69 (emphasis added).
- Thus, neither D&M nor Bang & Olufsen were able to develop synchronous playback on their own. Bang & Olufsen chose to seek a license to Sonos's synchronous playback patents (which Sonos did not provide), and D&M chose to copy Sonos's synchronous playback products. But even copying Sonos's products required substantial engineering effort by D&M despite D&M's long history of successfully developing and bringing audio products to market.

- The Office Action suggests that a person of skill in the art would have been motivated to modify and combine the teachings of Blank and Gray because Blank and Gray are assigned to the same assignee (Microsoft) and Blank incorporates Gray by reference.
  - Patentee acknowledges that a person of skill in the art may have been motivated to use the teachings of Blank with the teachings of Gray *in the manner proposed in Blank*. Office Action, pp. 10-11. But Patentee disagrees that Blank somehow suggests combining and modifying Gray with Blank as

proposed in the Office Action, which is different than how Blank suggests using Gray.

- In particular, the Office Action contends that persons of skill in the art would combine and modify the devices in Blank and/or Gray to create a hypothetical device that performs the functions recited in the claims, or that the hypothetical device could be implemented as a PC that can effectively perform any software function.
- However, the Office Action cites no authority to explain:
  - why incorporation by reference would motivate a person of skill in the art to combine and modify the devices in Blank or Gray to create the proposed hypothetical device not disclosed in Blank or Gray, and/or
  - why someone would be motivated to configure the proposed hypothetical device to perform the combination of features in a manner not taught or suggested in Blank or Gray.
- Patentee respectfully requests that the Office consider objective indicia of non-obviousness including industry praise from Microsoft (assignee of Blank and Gray) showing that modifying and combining the teachings of Blank and Gray as proposed in the Office Action was not obvious to persons of skill in the art at the time of the invention.
- For example, a 2006 email to Nick Millington (the inventor) from Craig Murphy (of Microsoft) states, "I am listening to the 4 [Sonos] ZP80s ***all linked in Party Mode*** streaming content from Vista. I've got all four up on my mixer and ***all four are in perfect sync!! Sounds great.***" Ex. 7: PTX 660 at SONDM000140162 (emphasis added).
- Also, a 2006 email to Nick Millington (the inventor) and John MacFarlane (the Sonos CEO) from Dave Fester (of Microsoft) explains that Microsoft "demoed the Sonos system today at our Microsoft Global Connect Summit here in Hong Kong," because Microsoft "***wanted everyone to see how cool the Sonos system is in action***." He explained that Microsoft "setup 2 rooms and showed off the power of playing music located on the PC in those separate rooms and then of course, ***linking them together***" and that "***[t]he reception was amazing***..." He added that "***Microsoft is very excited about Sonos***." Ex. 8: SONDM0001040165 (emphasis added).

- The Office Action contends, "one would also be motivated to combine Gray with Blank in the case where one may need to convert information from a non-isosynchronous network to an isosynchronous network," and that "[t]his would also lead to the combination of Blank and Gray having the ability to adapt to different network systems to reach a larger group of consumers." Office Action, pp. 11-12. But it's not clear from the record how (if at all) converting from non-isosynchronous to isosynchronous networks would in any way provide motivation to make the combinations and modifications proposed in the Office Action.

II. Additional objective indicia of non-obvious show that persons of skill in the art at the time of the invention would not have found the claimed combination of elements obvious

"Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art." *Varian Medical v. William Beaumont Hospital*, IPR 2016-00162, p. 31, 64 (May 4, 2017) (affirming the patentability of challenged claims because the very strong objective indicia of non-obviousness outweighed the Board's conclusion that the prior art disclosed all of the claim elements and that persons of skill in the art would have been motivated to combine the teachings of the prior art with a reasonable expectation of success to arrive at the claimed invention); *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1326-1337 (Fed. Cir. 2016) (affirming the patentability of challenged claims because even though the prior art disclosed all the claim elements, very strong objective indicia of non-obviousness outweighed competing evidence from both parties as to whether persons of skill in the art would have been motivated to combine the teachings of the prior art with a reasonable expectation of success to arrive at the claimed invention).

"The objective indicia of non-obviousness play an important role as a guard against the statutorily proscribed hindsight reasoning in the obviousness analysis. Indeed, we have held that 'evidence of secondary considerations may often be the most probative and cogent evidence in the record.'" *WBIP*, 829 F.3d at 1328 (Fed. Cir. 2016) (citations omitted); *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 36, (1966) ("[Objective indicia] may also serve to guard against slipping into use of hindsight, and to resist the temptation to read into the prior art the teachings of the invention in issue."). To be afforded weight in the obviousness analysis, objective indicia of non-obviousness must have a nexus to the claimed invention. However, "there is a presumption of nexus for objective considerations when the patentee shows that the asserted objective evidence is tied to a specific product and that product 'is the invention disclosed and claimed in the patent.'" *WBIP*, 829 F.3d at 1317 (citations omitted).

Here, as outlined below, there is substantial objective indicia of non-obviousness, including evidence presented at trial of (A) industry praise, including praise by the third-party requestor, (B) copying, including copying by the third-party requestor, (C), commercial success, and (D) failure of others. Further, the evidence outlined below is tied to one or both of (i) the Sonos media players and playback systems that perform the synchronous playback functions recited in the claims, and (ii) the third-party requestor's media players and playback systems that perform the synchronous playback functions recited in the claims. Thus, all the objective indicia of non-obviousness outlined below has a proper nexus with the claimed invention.

A. Industry Praise

"Evidence that the industry praised a claimed invention or a product which embodies the patent claims weighs against an assertion that the same claim would have been obvious. ***Industry participants, especially competitors, are not likely to praise an obvious advance over the known art***. Thus, if there is evidence of industry praise in the record, it weighs in favor of the nonobviousness of the claimed invention." *WBIP*, 829 F.3d at 1334 (emphasis added) (citing

Institut Pasteur & Universite Pierre Et Marie Curie v. Focarino, 738 F.3d 1337, 1347 (Fed. Cir. 2013) ("[I]ndustry praise...provides probative and cogent evidence that one of ordinary skill in the art would not have reasonably expected [the claimed invention].").

Here, Sonos's competitors, including D&M (a Sonos competitor and the third-party requestor), as well as Microsoft (the assignee of Blank and Gray) praised the capabilities of Sonos's products, all of which practice the synchronous playback features recited in the claims.

1. D&M praise for Sonos products embodying the claimed invention

- In an internal D&M technical report circa 2007 or later reviewing Sonos patents and published applications, D&M engineer Yuuji Kaneko stated, "***Sonos has excellent synchronous playback feature***." Ex. 9: PTX 270 (emphasis added).

- An internal D&M presentation from 2010 given by D&M's Chief Technical Officer:
  - summarizes the features of the Sonos system, stating, "Each zone can ***play the same music*** or different music and music playback in all 32 zones can be ***perfectly synchronized***." Ex. 1: PTX 275 at D+M_0408322 (emphasis added);
  - states, "As such, every Sonos Zone can act like bridge, a switch, a wireless repeater, ***a synchronized source and a synchronized player***. As long as one Sonos device is connected to the home network via Ethernet, ***it is virtually impossible to hook to it up 'wrong'.***" Ex. 1: PTX 275 at D+M_0408330 (emphasis added);
  - acknowledges a review of the Sonos S5 player, which states, "You frequently hear reviewers throw around words like 'transcendent' and 'perfect,' but rarely does a product live up to its own hype. In the case of the Sonos line of music streaming boxes, ***the experience really is transcendent, and the devices really are perfect***." Ex. 1: PTX 275 at D+M_0408321 (emphasis added); and
  - acknowledges user feedback, which states, "We've had our Sonos system for just over a year, and ***it's fantastic***." Ex. 1: PTX 275 at D+M_0408334 (emphasis added).

- In an internal D&M email from 2012 discussing Sonos's synchronous playback capabilities, Hiroyuki Yazawa, a D&M engineer stated, "…***it's amazing accuracy over [an] IP network***." Ex. 10: PTX 146 at D+M0072389 (emphasis added).

- In a 2012 internal D&M email, Marty Wachter, a D&M engineer stated, "I have had Sonos in my home since 2005. I think ***their synchronization is the best I've ever heard***." Ex. 11: PTX 193 at D+M_0158702 (emphasis added).

- In an internal D&M presentation from 2012 discussing the feature set of the multi-room audio system D&M was developing, D&M described Sonos's feature for playing back audio in synchrony (e.g., Party Mode, Multiple Party Mode) as a "***must have***." Ex. 12: PTX 245 at D+M0264547.

2. Microsoft praise for Sonos products embodying the claimed invention

- In a 2006 email to Nick Millington (the inventor), Craig Murphy (of Microsoft), states, "I am listening to the 4 [Sonos] ZP80s ***all linked in Party Mode*** streaming content from Vista. I've got all four up on my mixer and ***all four are in perfect sync!! Sounds great.***" Ex. 7: PTX 660 at SONDM000140162 (emphasis added).

- In a 2006 email to Nick Millington (the inventor) and John MacFarlane (the Sonos CEO), Dave Fester (of Microsoft) explains that Microsoft "demoed the Sonos system today at our Microsoft Global Connect Summit here in Hong Kong," because he "***wanted everyone to see how cool the Sonos system is in action***." He explained that Microsoft "setup 2 rooms and showed off the power of playing music located on the PC in those ***separate rooms*** and then of course, ***linking them together***" and that "***[t]he reception was amazing***..." He added that "***Microsoft is very excited about Sonos***." Ex. 8: SONDM0001040165 (emphasis added).

3. Widespread industry praise from leading news organizations and trade publications for Sonos products embodying the claimed invention

- A 2005 product review from PC Magazine of the first generation Sonos system embodying the claimed synchronous playback feature states, "Most users love the idea of multiple independent streams of music: rock in the rec room, classical in the kitchen, and jazz on the patio, all simultaneously. That's something most other hubs can do. But the Zone-Player does the opposite as well: ***It can play the same music throughout the house, perfectly synchronized. Even though that may seem drop-dead simple, other hubs don't do it.*** And you can join multiple rooms to play the same music or put something on in other rooms on the fly." Ex. 13: PTX 657 at SONDM000114632 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 11 (finding that this exhibit, which was previously numbered PTX1193 (see Ex. 15, p. 22), "bestows industry award and describes industry praise for [Sonos's] synchronization feature").

- A 2005 product review from Playlist magazine of the Sonos system embodying the claimed synchronous playback feature states, "You can control each ZonePlayer independently of the others, or you can ***sync all of them for full-house entertainment***. The result? The music you want, in whatever rooms you want—***the whole-house-music thing done right***." Ex. 16: PTX 658 at SONDM000114645 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 11 (finding that this exhibit, which was previously numbered PTX1194 (see Ex. 15, p. 22), "describes industry praise for [Sonos's] synchronization feature").

- A 2005 product review from The Wall Street Journal of the Sonos system embodying the claimed synchronous playback feature states, "The system works in multiple rooms of a home, allowing you to play different songs, or the ***same songs, in each room simultaneously***. . . The Sonos system is ***easily the best music-streaming product*** I

have seen and tested. ***It's the Lexus of the category***." Ex. 17: PTX 653 at SONDM000114132 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 10 (finding that this exhibit, which was previously numbered PTX1175 (see Ex. 15, p. 22), "describes industry praise for [Sonos's] synchronization feature").

- A 2011 product review from Tech Digest of the Sonos system embodying the claimed synchronous playback feature states "***Sonos speaker systems come into their own however once you have multiple speakers in different rooms***. You're then able to control what source and track is playing in each room individually from the apps or hardware remote, tweaking volumes as well as setting alarms. ***Synchronising all the speakers from a simple button press causes no lag in sound should you want the same tunes playing throughout a house***, while it's also perfectly possible to have say a jazz room in the bathroom, an easy listening room in the bedroom and a death metal party in the living room. Ex. 18: PTX 659 at SONDM000132843 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 10 (finding that this exhibit, which was previously numbered PTX1231 (see Ex. 15, p. 22), "contains industry praise for [Sonos's] synchronization feature").

- A 2013 product review from NBC News of the Sonos system embodying the claimed synchronous playback feature states, "If you're not familiar with ***Sonos***, this company ***revolutionized the home audio world*** a decade ago when it launched the first (rather expensive) Sonos kits: wireless nodes that you set up around the house that could play music tracks from a home computer or Internet radio. If you wanted the same song in every room, no problem, the tracks would be ***perfectly in sync***, but you could also play different tracks in different rooms, too. ***At the time, this was mind blowing***." Ex. 19: PTX 652 at SONDM000033218 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 10 (finding that this exhibit, which was previously numbered PTX813 (see Ex. 15, p. 22), "describes industry praise for [Sonos's] patented synchronization feature").

- A 2013 product review from Macworld of the Sonos system embodying the claimed synchronous playback feature states, "***Sonos is the gold standard when it comes to multiroom audio*** and it's a lot more flexible than simply hooking up speakers to a few Airport Expresses spread around your home. Sonos speakers create their own wireless mesh network, so you only need to connect one speaker (or a Sonos bridge) to your home network. Now you can drive the system from any computer or handheld device, ***playing music in sync throughout the house*** or different songs in different rooms." Ex. 20: PTX 654 at SONDM000114156 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 11 (finding that this exhibit, which was previously numbered PTX1177 (see Ex. 15, p. 22), "describes industry praise for [Sonos's] patented synchronization feature").

- A 2015 product review in Mashable of the Sonos system embodying the claimed synchronous playback feature states, "In 2002, the second-gen iPod was only just getting Windows compatibility, the iTunes Music Store hadn't yet launched, Napster had been shut down and Pandora had not debuted to the public. Digital sales were yet

to be incorporated into Billboard's music single charts and there were less than 16 million U.S. households with a high-speed broadband connection. In context then, MacFarlane's idea of a digital streaming music service that used your internet connection to bring you music from both your computer and the web, and ***send it all around your home*** -- without wires -- looks ***positively revolutionary***." Ex. 21: PTX 656 at SONDM000114531 (emphasis added). The product review further explains that "You can play different music on different speakers -- so a Spotify playlist on the Play:3 in the kitchen and an album from your computer on the Play:5 in the lounge, or play the same tune, ***perfectly synced***, on both players." Ex. 21: PTX 656 at SONDM000114534 (emphasis added); *see also* Ex. 14: D. Del. Court's Dec. 8, 2017 Order re Exhibit Objections, at p. 11 (finding that this exhibit, which was previously numbered PTX1191 (see Ex. 15, p. 22), "describes industry praise for [Sonos's] synchronization feature").

B. Copying

"'Copying may indeed be another form of flattering praise for inventive features,' and thus evidence of copying tends to show nonobviousness." *WBIP,* 829 F.3d at 1336 (quoting *Crocs, Inc. v. Int'l Trade Comm'n*, 598 F.3d 1294, 1311 (Fed. Cir. 2010); *Windsurfing Int'l, Inc. v. AMF, Inc.*, 782 F.2d 995, 1000 (Fed. Cir. 1986) ("[C]opying the claimed invention, rather than one within the public domain, is indicative of non-obviousness."). "***The fact that a competitor copied technology suggests it would not have been obvious***." *WBIP*, 829 F.3d at 1336 (emphasis added).

Here, Sonos's competitor, D&M (the third-party requestor), intended to copy and did indeed copy the Sonos system embodying the claimed synchronous playback features.

- A D&M internal presentation circa 2012 lists one of D&M's "Key Strategy and Tactics" is to ***build a "SONOS Killer***." Ex. 22: PTX 287 at D+M_0135471 (emphasis added).

- In an internal D&M email from 2012, D&M Vice President, Chris Commons, states, "[W]e recently completed a ***detailed analysis of the Sonos product line and features***. Ichikawa-san sent you the summary presentation of the ***Sonos teardown***. Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. ***The summary of the plan is 20 months, 439 man-months, and $5.33M***." Ex. 4: PTX 198 at D+M_0161242 (emphasis added).
    - D&M allocated about 30% of the total development effort just to synchronized playback, i.e., 128 man-months (20,480 hours) of the 439 man-month (70, 240 hours) development effort. Ex. 5: PTX 200 at D+M_0161268.

- In an internal D&M presentation from 2013 containing "R&D Strategy and Requirement[s]," D&M identifies "Step 1" of "How to Win" is to "***Make Sonos-copy products***..." Ex. 23: PTX 180 at D+M_0129410 (emphasis added).

- A 2014 product review in Digital Trends of the Denon HEOS system (embodying the synchronous playback features recited in the claims) states, "As the market for multi-room wireless speakers continues to expand, a new competitor aims to knock the pioneer of the genre, Sonos, from its throne. The seasoned audio veterans at Denon today unveiled a brand new line of wireless components looking to take on the multi-room audio champ, consisting of a three-speaker series dubbed HEOS. For those unfamiliar, ***about 10 years ago Sonos created a line of extremely succinct wireless speakers that operate in tandem, allowing users to stream music over Wi-Fi from a single source to multiple rooms without latency***, or send a different source to each speaker, all from an extremely intuitive and powerful app on a computer or mobile device. ***Since then, the genre has exploded, spawning copycats from the likes of Samsung, Bose, and others***. With HEOS, ***Denon appears to be making little effort to hide its mimicry of the popular system***.... Eight years in the making, Denon boasts its new lineup offers "audiophile-level synchronization" which suggests highly tuned clocking for playback." Ex. 6: SONDM000033268-70 at SONDM000033268-69 (emphasis added).

- A 2014 article in Venture Beat summarizing the results of a product comparison between the Sonos and D&M systems (both embodying the claimed synchronous playback features) states, "***If you're familiar with the Sonos product line, you'll get a serious case of déjà-vu looking at the HEOS offering. Price for price and product for product, the core product offering is nearly identical***." SONDM000033984. "Both systems let you stream music to each speaker independently, or you can group as many speakers as you like into a single zone where ***all speakers play in perfect sync***, with the HEOS app offering a friendly drag-and-drop method for configuring zones." Ex. 24: SONDM000033983-94 at SONDM000033990 (emphasis added).

C. Commercial Success

"When 'a product attains a high degree of commercial success, there is a basis for inferring that [attempts to a solution] have been made and have failed.'" Demonstrating that an invention has commercial value, that it is commercially successful, weighs in favor of its non-obviousness." *WBIP*, 829 F.3d at 1337 (quoting *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1376 (Fed. Cir. 2005)).

Here, the Sonos products embodying the claimed synchronous playback feature enjoyed substantial commercial success.

- An internal D&M presentation from 2010 given by D&M's Chief Technology Officer states, "Sonos has been ***the only successful multi-zone home audio*** solution marketed to consumers (as opposed to custom installation). ***Offerings from Logitech, Cisco and Yamaha have failed***." Ex. 1: PTX 275 at D+M 0408332 (emphasis added).

- An internal D&M presentation from circa 2013 refers to Sonos, stating, "***One Brand Dominates the Market!***" and confirms that the "One Brand" is Sonos. Ex. 2: PTX 476 at SONDM000133546 (emphasis added).

- A 2013 email sent by D&M's Chief Technology Officer states that the "conclusion" from a recent discussion with D&M's Chief Executive Officer was that "***D&M focuses entirely on multi-room audio*** and experiences or ***[D&M] will die*** (literally) within a couple of years. ***Sonos is now #1 by dollar volume*** in many markets across the world." Ex. 25: PTX 231 at D+M_0221104 (emphasis added).

- An internal D&M document from 2013 states that there is ***"[n]o viable alternative to Sonos in sight***" and shows that ***Sonos had 90% market share*** in the global multi-room audio market in 2012-13. Ex. 26: PTX 167 at D+M_0102288-89 (emphasis added).

D. Failure of Others

Failure of others to achieve the results of the claimed invention is evidence of non-obviousness. See, e.g., *WBIP*, 829 F.3d at 1332 (citing *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004)).

Here, Sonos's competitors -- including the third-party requestor and other sophisticated companies with long histories of researching, developing, and successfully bringing audio products to market -- tried and failed on their own to deliver media playback devices that could play back content in synchrony together.

- An internal Sonos email from 2005 memorializing a conversation between Sonos engineers and Bang & Olufsen engineers states that the Bang & Olufsen engineers "***have been trying to solve the problem of synch for a while and are stuck***" and that "[t]heir measurements show [the Sonos system] never out of synch by more than 3ms." Bang & Olufsen asked whether Sonos would be willing to license its synchronous playback intellectual property. Ex. 3: PTX 490 at SONDM000140123-24 (emphasis added).

- An internal D&M presentation from circa 2013 states that ***Sonos is the "One Brand [that] Dominates the [Multi-Room Audio] Market***" and that "***Others Have Tried***" but "***They have Failed***," including "Bose, Samsung, Bluesound, Nuvo, and Korus." Ex. 2: PTX 476 at SONDM000133546-47 (emphasis added).

- An internal D&M presentation from 2010 given by D&M's Chief Technology Officer states, "Sonos has been ***the only successful multi-zone home audio*** solution marketed to consumers (as opposed to custom installation). ***Offerings from Logitech, Cisco and Yamaha have failed***." Ex. 1: PTX 275 at D+M 0408332 (emphasis added).

- In an internal D&M email from 2012 discussing Sonos's synchronous playback capabilities, Achim Schulz, a D&M engineer asked, "***Do we have any idea how they can synchronize so perfectly***? This is related to their mesh network or they have other technical advanced strategy?" In response, Hiroyuki Yazawa, a D&M engineer stated, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used in both of network driver and audio driver, where network drivers exchanges precise system timer (clock) information (like what defined in IEEE1588) and audio driver does some precise buffer control, though ***it's only a guess***." Ex. 27: PTX 146 at D+M0072389 (emphasis added).

- An internal D&M competitive research presentation from 2013 on the PURE Jongo Wireless Audio System described the system as having "***poor audio synchronization***." PTX 179 at D+M_0128194 (emphasis added). "To the average person it will sound synchronized but ***it made me dizzy***. I wonder if the engineering team has actually calculated the phase differential? ***It sounds to me like it is drifting continuously back and forth***." Ex. 28: PTX 179 at D+M0128159 (emphasis added).

- In an internal Sonos email from 2005 summarizing test results of a competing product – the Squeezebox 3 – Sonos engineer, Jonathan Lang, noted, "***Internet Radio quickly goes out of sync (less than 3 min)***. I played a very long track (more than 50min long) and the SlimDevices ***slowly drifted out of sync to the point where it was noticeable after around 30min***." Ex. 29: SONDM000138992 (emphasis added).

If you have questions, or if you would like additional information to prepare for the interview, please feel free to call me.

Best regards,



Jeff Armstrong
312-913-2104 (office)

Reexamination	**Application/Control No.** 90013959	**Applicant(s)/Patent Under Reexamination** 9213357
	Certificate Date	**Certificate Number**

Requester Correspondence Address: ☐ **Patent Owner** ☒ **Third Party**
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	05/11/2018 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., 1:16cv00141 (OPEN)		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO THE FINAL OFFICE ACTION
MAILED MARCH 16, 2018

Please consider the following Remarks submitted in response to the Final Office Action mailed on March 16, 2018 in the above-captioned reexamination.

A listing of the **PENDING CLAIMS** begin on page 2.

REMARKS begin on page 7.

Patentee authorizes the Office to charge any underpayment or credit any overpayment of fees in connection with the above-captioned reexamination to Deposit Account 13-2490.

CLAIMS

1. (Original) A method comprising:

receiving, by a first playback device from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information (i) obtaining, by the first playback device from the audio information source outside of the LAN, the audio information; (ii) transmitting, by the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) playing back, by the first playback device, the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

2. (Original) The method of claim 1, further comprising:

after receiving the control information, additionally (i) generating, by the first playback device, the playback timing information associated with the audio information; and (ii) generating, by the first playback device, the device clock information of the first playback device.

3. (Original) The method of claim 1, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

4. (Original) The method of claim 3, wherein the first and second playback devices are members of a synchrony group, and wherein the method further comprises:

transmitting, by the first playback device to the network device, status information that comprises a status of the synchrony group.

5. (Original) The method of claim 4, wherein the status information further comprises an identification of each playback device in the synchrony group.

6. (Original) The method of claim 5, wherein the status information further comprises an identification of a master playback device of the synchrony group.

7. (Original) The method of claim 6, wherein the first playback device is the master playback device of the synchrony group.

8. (Original) A tangible non-transitory computer-readable medium having instructions stored thereon that, when executed, cause a first playback device to:

receive, from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, from the audio information source outside of the LAN, the audio information; (ii) transmit, to a second playback device, the audio

information, playback timing information associated with the audio information, and clock time information for the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the clock time information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

9. (Original) A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play

back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

10. (Original) The first playback device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

generate the playback timing information associated with the audio information; and

generate the device clock information of the first playback device.

11. (Original) The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

12. (Original) The first playback device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

transmit, to the network device, status information that comprises a status of the synchrony group.

13. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of each playback device in the synchrony group.

14. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of a master playback device of the synchrony group.

15. (Original) The first playback device of claim 14, wherein the first playback device is the master playback device of the synchrony group.

16. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of one or more slave playback devices in the synchrony group, and wherein the second playback device is one of the one or more slave playback devices in the synchrony group.

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

generate a plurality of frames, wherein an individual frame comprises at least a portion of the audio information and the playback timing information associated with the audio information, and wherein the first playback device transmitting to the second playback device the audio information, playback timing information, and device clock information of the first playback device comprises transmitting the plurality of frames to the second playback device.

18. (Original) The first playback device of claim 9, wherein the audio information comprises one of audio files or packetized streaming audio information.

19. (Original) The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.

20. (Original) The first playback device of claim 9, wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises sending, to the audio information source, a request for the audio information.

REMARKS

I. Status of the Claims

Claims 9-12 and 19 of U.S. Pat. 9,213,357 (Millington '357) are subject to reexamination, of which claim 9 is independent. Claims 1-8, 13-18, and 20 are not subject to reexamination. Patentee has not amended the claims.

II. Summary of the Final Office Action

In the Final Office Action, the Office: (i) withdrew the double patenting rejections based on U.S. Pat. 9,195,258, *The MP3 and Internet Audio Handbook* (Handbook), and alleged Sonos admitted prior art (APA); (ii) withdrew the 35 U.S.C. § 103 rejections based on U.S. Pat. 6,611,537 (Edens) and Handbook; and (iii) maintained the 35 U.S.C. § 103 rejections of claims 9-12 and 19 based on U.S. Pub. 2004/0252400 (Blank), U.S. Pub. 2002/0150053 (Gray), and the alleged APA.

III. Response to the § 103 Rejections

Further to the reasons set forth in Patentee's December 20, 2017, Response, and in response to the "RESPONSE TO ARGUMENTS" section in the Final Office Action, Patentee respectfully requests that the Office withdraw the § 103 rejections of claims 9-12 and 19 based on Blank, Gray, and the alleged APA for at least the reasons that: (A) the proposed combination of Blank and Gray requires changing the functions of the components in Gray, and thus, the rationale of MPEP 2143(I)(A) cannot be used to support the conclusion of obviousness; (B) the purported motivation to combine the teachings of Blank and Gray lacks a rational basis to support the legal conclusion of obviousness; (C) the components of Blank could not have been modified and combined (or modified and combined with the elements of Gray) to perform the

claimed invention with a reasonable expectation of success without undue experimentation; (D) it would not have been obvious to make the separable components of Blank and Gray integral as proposed because the inventor's insight to eliminate the need for perpetual synchronization to a dedicated master clock was contrary to the understanding and expectations of Blank and Gray, and (E) the strong objective evidence of non-obviousness weighs in favor of the patentability of the challenged claims, including competitor praise of the patented synchronous playback feature, competitor copying of products embodying the patented synchronous playback feature, and the struggles and failures of competitors to implement synchronous playback functionality.

A. The proposed combination of Blank and Gray requires changing the functions of the components in Gray, and thus, the rationale of MPEP 2143(I)(A) cannot be used to support the conclusion of obviousness

In the "RESPONSE TO ARGUMENTS" section of the Final Office Action, the Office contends that a person of skill in the art could make the proposed combinations and modifications because the proposed combinations and modifications "would yield predictable results," "could be achieved with a reasonable expectation of success," "would not require undue experimentation," "would not be overly complicated," and that Blank incorporates Gray by reference. Final Office Action, pp. 6-12. Thus, the Final Office Action essentially contends that the claims are obvious in view of Blank and Gray because "all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods ***with no change in their respective functions***, and the combination yield[s] nothing more than predictable results to one of ordinary skill in the art." Final Office Action, pp. 6-12; MPEP 2143(I)(A) (emphasis added) (quoting *KSR v. Teleflex*, 550 U.S. 398, 416 (2007)). But as the MPEP makes clear, "[i]f ***any*** of these findings cannot be made, then this rationale cannot be

used to support a conclusion that the claim would have been obvious to one of ordinary skill in the art." MPEP 2143(I)(A) (emphasis added).

Here, and contrary to the assertion in the Final Office Action, the proposed combination of Blank and Gray ***requires a change to the respective functions*** of the components in Gray, and thus, the rationale of MPEP 2143(I)(A) cannot be used to support the conclusion that the claims are obvious in view of Blank and Gray. In particular, the Final Office Action contends that a "media synch player 110 [of Blank] that includes a time server 120 [of Blank] could include the time stamp [of Gray] into the multimedia packets of the audio data from media file 210 [of Blank]…***which is then provided to other media synch players 110 [of Blank] as 'playback timing data' for synchronized playback***." Final Office Action, p. 20 (emphasis added). However, Blank teaches using Gray's timestamping feature for synchronizing the internal clock a media synch player 110 to a time server 120 -- ***not as playback timing information for synchronizing playback of media*** by multiple media synch players.

Synchronizing two clocks across a network is different than synchronizing playback of media by two (or more) devices. Clock synchronization alone is not sufficient to achieve synchronous playback of media content in a networked audio system. December 20, 2017, Response, pp. 22-23; Wolfe Dec. ¶ 25. Blank recognizes the technical distinction between these two separate concepts. Compare Blank ¶¶ 42-51 (describing "Time Synchronization" of the media synch players 110, control console 125, and time server 120) with Blank ¶¶ 52-59 (describing "Media Synch Player Operation Control" including "coordination of each of the media synch players 110 in providing content…in a predetermined sequence."). And importantly, Blank teaches using Gray in the context of synchronizing a media synch player's

internal clock with the time server 120 -- not in the context of synchronizing playback of media by the media synch players 110.

In particular, Blank explains that each media synch player 110 and the controller 125 "synchronize their internal clocks to the time server" 120. Blank, ¶ 44. In connection with synchronizing a media synch player's 110 internal clock to the time server 120, Blank describes a clock synchronization feedback loop between the media synch players 110 and the dedicated time server 120, where a media synch player 110 transmits timing information from its internal clock "***in a non-isosynchronous manner*** back to the time server 120" (i.e., via a variable delay network) where the timing information from the media synch player 110's internal clock is "combined with the time information derived from the time server to speed up or slow down rendering of the clock[] 212 in the individual media synch player[] 110." Blank, ¶ 45 (emphasis added).

Blank recognized that "IP networks do not guarantee the timely delivery of any information" and that "[t]his uncertainty of IP networks is attributable to delays, latency, jitters and other inherent network characteristics." Blank, ¶ 43. So, to provide more consistent delivery of timing information for the clock synchronization feedback loop, Blank instructs persons of skill in the art to read Gray for "[a] more detailed description of the ***use of common time to convert a non-isosynchronous network to an isosynchronous network***." Blank, ¶ 44 (emphasis added). Figures 9-10 and ¶¶ 87-90 of Gray best illustrate and describe a scenario where Gray's method of emulating a constant delay network (isosynchronous) over a variable delay network (non-isosynchronous) could be used to provide more consistent delivery of timing information for Blank's clock synchronization feedback loop as suggested by Blank.

"Figure 9 illustrates a network configuration 900 in which a transmitter application 901 controls the time base across a variable delay network 903." Gray, ¶ 87. "Figure 10 illustrates a method 1000 for emulating a constant delay network over the variable delay network…described with respect to FIG. 9." Gray, ¶ 88. "An example of a variable delay network in which the method 1000 of FIG. 10 may be implemented is an IEC 802.11 wireless network." Gray, ¶ 90.

In the context of Blank's clock synchronization feedback loop, "[t]he transmitter link layer controller [of Blank's media synch player 110] periodically transmits the transmitter application time base to…the receiver link layer controller 904 [of Blank's time server 120] over the variable delay network 903 (act 1002)." Gray, ¶ 89; Blank, ¶ 45. "[T]he clock registers at the transmitter [of Blank's media synch player 110] and receiver [of Blank's time server 120] link layer controller (i.e., the time base 913 and the time base 914) may be kept synchronized." Gray, ¶ 89; Blank ¶ 44 ("All of the elements synchronize their internal clocks to the time server."). "The transmitter link layer controller 902 [of Blank's media synch player 110] includes the transmitter application time base in each packet [i.e., the packet has a timestamp with the media synch player's current time, which is synchronized with the time server 120] … and then [the media synch player 110] dispatches the packet over the network (act 1004)." Gray, ¶ 90; Blank, ¶ 45. Blank's time server 120 then combines Blank's media synch player's 110 timing information contained in Gray's time stamp "with the time information derived from the time server to speed up or slow down rendering of the clock[] 212 in the individual media synch player[] 110," to synchronize the media synch player's 110 internal clock to the time server 120. Blank, ¶ 45.

Thus, Blank teaches using Gray's timestamping feature for synchronizing the internal clock of a media synch player 110 with a time server 120 -- ***not as playback timing for***

synchronizing playback of media by multiple media synch players as proposed in the Final Office Action. Because the proposed combination of Blank and Gray requires that Gray's timestamping feature be used to perform a ***different function*** than taught by Blank, the Final Office Action's assertions that the proposed combinations and modifications "would yield predictable results," "could be achieved with a reasonable expectation of success," "would not require undue experimentation," "would not be overly complicated," and that Blank incorporates Gray by reference are not sufficient to support the legal conclusion that the claims are obvious in view of Blank and Gray. MPEP 2143(I)(A).

B. The purported motivation to combine the teachings of Blank and Gray lacks a rational basis to support the legal conclusion of obviousness

In addition to the generic bases of MPEP 2143(I)(A), the "RESPONSE TO ARGUMENTS" section of the Final Office Action also contends, "one would also be motivated to combine Gray with Blank in the case where one may need to convert information from a non-isosynchronous network to an isosynchronous network," and that "[t]his would also lead to the combination of Blank and Gray having the ability to adapt to different network systems to reach a larger group of consumers." Final Office Action, pp. 11-12.

However, the purported motivation lacks a rational basis to support the legal conclusion of obviousness because Blank discloses a scheme for synchronizing playback among multiple playback devices, albeit in a different way than what is recited in the claims. Wolfe Dec., ¶ 57. Because Blank teaches a scheme for synchronous playback, using Gray's timestamping feature for synchronous playback in the manner proposed in the Final Office would be a solution for a problem that does not exist in Blank's system. *In re Rinkevich*, BPAI, 2007-1317 (Decided May 29, 2007), p. 9 ("[A] person of ordinary skill in the art having common sense at the time of the

invention would not have reasonably looked to [a second reference] to solve a problem already solved by [a first reference]."); December 20, 2017, Response, pp. 31-34.

Furthermore, if a person of skill in art did combine Blank with Gray for the reason suggested in the Final Office Action (i.e., "to convert information from a non-isosynchronous network to an isosynchronous network"), the resulting system still would not perform the synchronous playback functions recited in the claims because converting information from a non-isosynchronous (variable delay) network to an isosynchronous (constant delay) network as taught by Blank and Gray involves synchronizing internal clocks of network devices to a dedicated master clock for the network -- ***not synchronizing playback of media*** by two or more media playback devices over the network. Section III(A), *infra*; December 20, 2017, Response, pp. 33-34 ("nothing in Blank or Gray suggests that the time stamps in Gray's WAN solution for emulating a constant delay network over multiple heterogeneous networks could be used in Blank's LAN solution to facilitate synchronous playback among multiple devices as proposed in the Office Action") (citing Wolfe Dec. ¶¶ 58-59).

C. The components of Blank could not have been modified and combined (or modified and combined with the elements of Gray) to perform the claimed invention with a reasonable expectation of success without undue experimentation

The "RESPONSE TO ARGUMENTS" section of the Final Office Action asserts that combining and modifying the components of Blank or alternatively, combining and modifying the components of Blank and Gray, to practice the claimed invention "would not require undue experimentation" and "would not be overly complicated as suggested by the PO and Wolfe's Dec." Final Office Action, p. 9. But in contrast to the assertion in the Final Office Action, documents produced by the third-party requestor D&M – who was found by the jury in the

concurrent litigation to have willfully infringed Sonos's patents – show that building a device to perform the claimed synchronous playback functions required a great deal of experimentation and was quite a complex and complicated engineering undertaking.

For example, in a 2011 internal D&M technical report reviewing Sonos patent filings, Yuuji Kaneko (a D&M engineer) stated, "***Sonos has excellent synchronous playback feature***." Ex. 1: PTX 270, p. 2 (emphasis added). But despite having Sonos patent filings as a roadmap, D&M estimated in a January 19, 2012, email that it would need to spend $5.33M and invest 439 man-months (70,240 man-hours, assuming a 40-hour work week) over 20 months to copy Sonos's media playback system embodying the claimed invention. Ex. 2: PTX 198 at D+M_0161242 ("Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. The summary of the plan is 20 months, ***439 man-months***, and $5.33M.") (emphasis added). In the engineering project plan, D&M allocated ***128 man-months (20,480 hours)*** of the total development effort just to implement a copy of Sonos's patented synchronous playback feature. Ex. 3: PTX 200 at D+M_0161268.

Indeed, even with the benefit of having Sonos products to copy and Sonos patent filings to follow, D&M's engineers still could not figure out how to implement the synchronous playback function. In an internal D&M email from January 27, 2012, discussing Sonos's synchronous playback capabilities, Achim Schulz (a D&M engineer) asked, "***Do we have any idea how they can synchronize so perfectly?*** This is related to their mesh network or they have other technical advanced strategy?" Ex. 4: PTX 146 at D+M0072389 (emphasis added). In response, Hiroyuki Yazawa (another D&M engineer) stated, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used in both of network driver

and audio driver, where network drivers exchanges precise system timer (clock) information (like what defined in IEEE1588) and audio driver does some precise buffer control, though ***it's only a guess***." Ex. 4: PTX 146 at D+M0072389 (emphasis added).

D&M's engineers are unquestionably persons of ordinary skill in the art, and many arguably rise to the level of an expert in the field in view of their long history of successfully developing and bringing audio products to market. However, even though Sonos patent filings gave D&M a detailed blueprint to follow, copying Sonos products took D&M's engineers a great deal of effort and experimentation as late as 2012-2014 -- nearly a decade after the 2004 date of invention. And if using Sonos patent filings as a guide to copy Sonos products was that complicated and challenging for a team of experienced engineers at a leading audio company nearly a decade after the time of the invention, then consistent with Patentee's December 20, 2017, Response and the Wolfe Declaration, implementing the proposed modifications and combinations of Blank and Gray without the benefit of a tangible product to copy and detailed instructions in a patent specification certainly would not be a trivial task as suggested in the Final Office Action. This is especially true where, as here, the proposed combination of Blank and Gray requires a change to the respective functions of the components in Gray. See Section III(A), *infra*; December 20, 2017 Response, pp. 33-34; Wolfe Dec., ¶¶ 58-59.

Because the evidence shows that persons of skill in the art were unsure of how to implement a system to perform the patented synchronous playback feature and unable to implement a system to practice the patented synchronous playback feature without substantial engineering effort, Patentee submits that the proposed combinations and modifications of Blank and Gray could not have been achieved "with a reasonable expectation of success" and "without undue experimentation" as required to support the conclusion of obviousness.

D. The inventor's insight to eliminate the need for perpetual synchronization to a dedicated master clock was contrary to the understanding and expectations of Blank and Gray, and thus the claims are patentable over Blank individually or in combination with Gray

The "RESPONSE TO ARGUMENTS" section of the Final Office Action further contends that "the combination of devices to create one device is not new to the art of computer networking." Final Office Action, pp. 7-8.

Patentee acknowledges that making separable components integral, without more, is unlikely to be non-obvious. MPEP 2144.04(V)(B). However, it would not be obvious to combine previously-known separate components into a single integrated device when the resulting single integrated device functions in a manner contrary to the understandings and expectations of the prior art. MPEP 2144.04(V)(B) (citing *Schenck v. Nortron Corp.*, 713 F.2d 782 (Fed. Cir. 1983)).

The challenged claims in *Schneck* were directed to "a vibratory testing machine, comprising a rigidly fixed base structure 13…, a vibratory workpiece-holding structure 14…, [and] supporting means 15" where "said vibratory holding structure 14 and said base structure 13 as well as said supporting means 15 form[ed] jointly a single integral and gaplessly continuous piece." 713 F.2d at 784. The patent challenger argued that the claims were merely "making integral what had earlier been made in four bolted pieces." *Schneck*, 713 F.2d at 784. Observing that the challenged claims "include[d] the inventor's elimination of the need for damping," the Federal Circuit rejected the patent challenger's "making separable components integral" argument and upheld the validity of the challenged claims because the inventor's insight to remove the need for damping "was contrary to the understanding and expectations of the art,"

and thus, the claimed integrated structure embodying the inventor's insight would not have been obvious. *Schneck*, 713 F.2d at 785-86.

Here, it would not have been obvious to combine Blank's media synch player 110, time server 120, and system controller 125, nor would it have been obvious to use Gray's modified time stamp functionality with a combination of Blank's media synch player 110, time server 120, and system controller 125, as proposed in the Final Office Action. Like the challenged claims in *Schneck*, the inventor's insight to remove the need to synchronize the internal clock of every playback device in the system to a dedicated and perpetual master clock (e.g., Blank's time server 120) while still achieving synchronized media playback was contrary to the understandings and expectations of the teachings of Blank and Gray. For example, Blank explains that "***[a]ll of the elements*** synchronize their internal clocks to the time server" so that "content from all of the media synch players 110 will be synchronized to the same moment in time." Blank, ¶ 44 (emphasis added). And Gray explains that "the invention permits for communication over a variable delay network that does not inherently have a time base" by "periodically transmit[ting] a current time to various receiver devices on the network in order to synchronize the devices on the network." Gray, ¶ 16.

Thus, both Blank and Grey expect and require network devices to be synchronized on a perpetual basis to some form of dedicated master clock for the network, e.g., Blank's time server 120 and/or Gray's common time base 322. In contrast to Blank and Gray, the patented invention enables the inventor's insight to remove the requirement that all playback devices be perpetually synchronized to a dedicated master clock as taught by Blank and Gray, by reciting that playback devices "play[] back audio information in synchrony" using information transmitted between the

two playback devices that includes, "audio information, "playback timing information," as well as the ***"device clock information of the first playback device."***

To illustrate the "making separable components integral" argument, the "RESPONSE TO ARGUMENTS" section of the Final Office Action further states, "it is well known in the art that one can combine different servers to be housed in one box and would not change the function of each server, i.e., the email server would still send and receive email and a printer server would still send and receive print requests." Final Office Action, pp. 7-8. However, the example of combining an email server and print server "in one box" greatly oversimplifies the complexities that logically follow from combining the separate components of Blank "in one box." When combining an email server and print server "in one box," the two components do not need to interact with each other to perform their individual functions, and each component can perform its own function without causing any conflict with the other component. But combining Blank's media synch player 110, time server 120, and control console 125 into a single box introduces complex inter-component and inter-device interactions and conflicts that do not exist when the components are separate. December 20, 2017, Response, pp. 30-31; Wolfe Dec., ¶ 49-56.

For example, Blank does not consider whether the media synch player component of a first consolidated device should synchronize its clock to (i) the clock of its internal time server component, or (ii) the clock of a different time server component of a different (and if so, which one) consolidated device. Similarly, Blank does not consider whether the control console component of the first consolidated device should synchronize its clock to (i) the clock of its internal time server component, or (ii) the clock of a different time server component of a different (and if so, which one) consolidated device. Further, Blank does not consider whether the media synch player component of the first consolidated device should be controlled via (i)

playback commands issued by its internal control console component, or (ii) playback commands issued by a different control console component of a different (and if so, which one) consolidated device. Additionally, Blank does not consider how to address synchronization conflicts arising when a first media synch player component of a first consolidated device plays media content in synchrony with a second media synch player component of a second consolidated device and (i) the clocks of the first and second media synch player components are synchronized to different time server components, (ii) the first and second media synch player components are controlled by different control console components, and/or (iii) one or both of the first and second media synch player components' clocks are synchronized to a different time server component than the control console component issuing playback commands to the first and/or second media synch player components.

These complex inter-component and inter-device interactions and conflicts flow directly from Blank's and Gray's requirements that all devices be synchronized to a dedicated master clock, e.g., Blank's time server 120 and/or Gray's common time base 322. But removing the requirement that all devices be perpetually synchronized to a dedicated master clock as taught in Blank and Gray greatly streamlines the operation of the system by removing the complexity-causing technical constraints imposed by Blank and Gray.

Because the inventor's insight to eliminate the need for perpetual synchronization to a dedicated master clock "was contrary to the understanding and expectations of the art," the playback devices implementing the patented synchronous playback feature recited in the claims would not have been obvious in view of Blank individually or in combination with Gray. *Schneck*, 713 F.2d at 785-86.

E. The strong objective evidence of non-obviousness weigh in favor of the patentability of the challenged claims

"Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art at the time of the invention, the totality of the evidence submitted, including objective evidence of non-obviousness, may lead to a conclusion that the challenged claims would not have been obvious to one of ordinary skill in the art." *Varian Medical v. William Beaumont Hospital*, IPR 2016-00162, p. 31, 64 (May 4, 2017) (affirming the patentability of challenged claims in view of objective evidence of non-obviousness ***even though the prior art disclosed all of the claim elements and persons of skill in the art would have been motivated to combine the teachings of the prior art with a reasonable expectation of success to arrive at the claimed invention***); *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1326-1337 (Fed. Cir. 2016) (affirming the patentability of challenged claims because ***even though the prior art disclosed all the claim elements***, very strong objective evidence of non-obviousness outweighed evidence that persons of skill in the art would have been motivated to combine the teachings of the prior art with a reasonable expectation of success to arrive at the claimed invention).

"The objective indicia of non-obviousness play an important role as a guard against the statutorily proscribed hindsight reasoning in the obviousness analysis. Indeed, we have held that evidence of secondary considerations may often be the most probative and cogent evidence in the record." *WBIP*, 829 F.3d at 1328 (Fed. Cir. 2016) (citations omitted). To be afforded weight in the obviousness analysis, objective evidence of non-obviousness must have a nexus to the claimed invention. However, there is a presumption of nexus for objective evidence when the patentee shows the objective evidence is tied to a specific product that embodies the claimed invention. *WBIP*, 829 F.3d at 1317 (citations omitted).

Here, as outlined below, there is substantial objective evidence of non-obviousness, including evidence presented at trial in the concurrent litigation of (1) competitor praise of the patented synchronous playback feature, (2) competitor copying of products embodying the patented synchronous playback feature, and (3) competitor struggles and failures to implement synchronous playback functionality. Further, the evidence outlined below is tied to one or both of (i) the patented synchronous playback feature and/or (ii) the Patentee's products embodying the patented synchronous playback feature. Thus, all the objective evidence of non-obviousness has a nexus with the claimed invention. Patentee respectfully requests that the Office consider the objective evidence of non-obviousness outlined herein pursuant to 37 C.F.R. § 1.116(e) for at least the reasons set forth in Patentee's Request to Consider Objective Evidence of Non-Obviousness submitted herewith on a separate paper.

1. Competitor praise for the patented synchronous playback feature

"Evidence that the industry praised a claimed invention or a product which embodies the patent claims weighs against an assertion that the same claim would have been obvious. ***Industry participants, especially competitors, are not likely to praise an obvious advance over the known art***. Thus, if there is evidence of industry praise in the record, it weighs in favor of the nonobviousness of the claimed invention." *WBIP*, 829 F.3d at 1334 (emphasis added).

Here, the Patentee's competitor, D&M – the third-party requestor and adjudged willful infringer from the concurrent litigation – expressed praise for the patented synchronous playback feature. For example:

- In an internal D&M technical report from 2011 reviewing Sonos patent filings, Yuuji Kaneko (a D&M engineer) stated, "***Sonos has excellent synchronous playback feature***." Ex. 1: PTX 270, p. 2 (emphasis added).
    - This praise has a nexus to the patented synchronous playback feature because the praise is referring to the synchronous playback feature disclosed and

described in the Patentee's patents and published patent applications in the family of related applications that includes the application that issued as the current patent under reexamination.

- In an internal D&M email from 2012 discussing Sonos's synchronous playback capabilities, Hiroyuki Yazawa (a D&M engineer) stated, "…***it's amazing accuracy over [an] IP network***." Ex. 4: PTX 146 at D+M0072389 (emphasis added).
    - This praise has a nexus to the patented synchronous playback feature because the praise is referring to the synchronous playback capability of actual Sonos products that practice the patented synchronous playback feature.

- In a 2012 internal D&M email, Marty Wachter (a D&M engineer) stated, "I have had Sonos in my home since 2005. I think ***their synchronization is the best I've ever heard***." Ex. 5: PTX 193 at D+M_0158702 (emphasis added).
    - This praise has a nexus to the patented synchronous playback feature because the praise is referring to the synchronous playback capability of actual Sonos products that practice the patented synchronous playback feature.

- An internal D&M presentation from 2010 given by D&M's Chief Technical Officer summarizes the features of the Sonos system, stating, "Each zone can ***play the same music*** or different music and music playback in all 32 zones can be ***perfectly synchronized***," and states, "every Sonos Zone can act like bridge, a switch, a wireless repeater, ***a synchronized source and a synchronized player***. As long as one Sonos device is connected to the home network via Ethernet, ***it is virtually impossible to hook to it up 'wrong'.***" Ex. 6: PTX 275 at D+M_0408322-30 (emphasis added).
    - This praise has a nexus to the patented synchronous playback feature because the praise is referring to the synchronous playback capability of actual Sonos products that practice the patented synchronous playback feature.

Because "competitors[] are not likely to praise an obvious advance over the known art," D&M's praise of the patented synchronous playback feature weighs in favor of the non-obviousness of the claimed invention. *WBIP*, 829 F. 3d at 1134.

2. Competitor copying of products embodying the patented synchronous playback feature

"Copying may indeed be another form of flattering praise for inventive features, and thus evidence of copying tends to show nonobviousness." *WBIP,* 829 F.3d at 1336 (internal quotes omitted). "***The fact that a competitor copied technology suggests it would not have been obvious***." *WBIP,* 829 F.3d at 1336 (emphasis added). In the context of non-obviousness,

"copying requires the ***replication of a specific product***," which "may be demonstrated either through internal documents" and/or by manufacture of a product having "substantial similarity to, the patented product (as opposed to the patent)." *Tokai Corp. v. Easton Enterprises, Inc.*, 632 F.3d 1358, 1370 (Fed. Cir. 2011) (Copying "requires evidence of efforts to replicate a ***specific product***.") (emphasis added).

Here, the evidence shows, *inter alia*, that the Patentee's competitor, D&M (the third-party requestor and adjudged willful infringer from the concurrent litigation) was aware of, had access to, and copied Sonos products that embody the claimed synchronous playback feature. For example:

- An internal D&M presentation from 2013 containing "R&D Strategy and Requirement[s]" identifies "Step 1" of "How to Win" is to "***Make Sonos-copy products***…" Ex. 7: PTX 180 at D+M_0129410 (emphasis added).
    - This evidence of copying has a nexus to the patented synchronous playback feature because all Sonos playback devices practice the patented synchronous playback feature, and thus, the evidence shows at least an intent to copy a specific product that embodies the patented synchronous playback feature.

- In an internal D&M email from 2012 outlining the third-party requestor's plan to copy Sonos products embodying the patented synchronous playback feature, Chris Commons (D&M Vice President), states, "[W]e recently completed a ***detailed analysis of the Sonos product line and features***. Ichikawa-san sent you the summary presentation of the ***Sonos teardown***. Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. ***The summary of the plan is 20 months, 439 man-months, and $5.33M***." Ex. 2: PTX 198 at D+M_0161242 (emphasis added).
    - This evidence of copying has a nexus to the patented synchronous playback feature because all Sonos playback devices practice the patented synchronous playback feature, and thus, the evidence shows access to a specific product that embodies the patented synchronous playback feature and a clearly-defined plan for copying a specific product that embodies the patented synchronous playback feature.

- D&M's internal engineering plan shows that it allocated 128 man-months (20,480 hours) of the total development effort to implementing a copy of Sonos's patented synchronous playback feature. Ex. 3: PTX 200 at D+M_0161268.
    - This evidence of copying has a nexus to the patented synchronous playback feature because all Sonos playback devices practice the patented synchronous

playback feature, and thus, the evidence shows access to a specific product that embodies the patented synchronous playback feature and a clearly-defined plan for copying a specific product that embodies the patented synchronous playback feature.

- The jury verdict from the concurrent litigation found D&M liable for willful infringement of Sonos patents. Ex. 9: Jury Verdict, Case No. 1:14-cv-01330-WCB (D. Del., Dec. 15, 2017) at pp. 1-4.
    - The jury's finding of willful infringement has a nexus to the patented synchronous playback feature because (i) the Jury's verdict of willful infringement was based on the evidence presented at trial showing that D&M copied Sonos playback devices, and (ii) all Sonos playback devices practice the patented synchronous playback feature. Ex. 10: Court's Final Jury Instructions, Case No. 1:14-cv-01330-WCB (D. Del., Dec. 15, 2017) at pp. 10-11.

Accordingly, these documents showing that the Patentee's competitor, D&M (the third party requestor and the adjudged willful infringer in the concurrent litigation) was aware of, had access to, tore down, and copied Sonos products embodying the patented synchronous playback feature weigh heavily in favor of the non-obviousness of the claimed invention. *WBIP*, 829 F.3d at 1336-37 (confirming a finding of copying based on evidence "that [the accused infringer's] engineers were aware of and had access to [the patentee's product embodying the patented feature] and shortly thereafter with express reference to [the patentee's product] adopted the same features in developing [the infringing product]").

3. Competitor struggles and failures to implement synchronous playback functionality

Failure of others to achieve the results of the claimed invention is evidence of non-obviousness. See, e.g., *WBIP*, 829 F.3d at 1332 (citing *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004)).

Here, Sonos's competitors -- including D&M and other sophisticated companies with long histories of researching, developing, and successfully bringing audio products to market --

tried and failed on their own to develop media playback devices that could play back content in synchrony together. For example:

- In an internal D&M email from 2012 discussing Sonos's synchronous playback capabilities, Achim Schulz (a D&M engineer) asked, "***Do we have any idea how they can synchronize so perfectly***? This is related to their mesh network or they have other technical advanced strategy?" In response, Hiroyuki Yazawa (a D&M engineer) stated, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used in both of network driver and audio driver, where network drivers exchanges precise system timer (clock) information (like what defined in IEEE1588) and audio driver does some precise buffer control, though ***it's only a guess***." Ex. 4: PTX 146 at D+M0072389 (emphasis added).
    - This evidence of failure has a nexus to the patented synchronous playback feature because it describes an industry leader's struggles with failure to understand how to implement the patented synchronous playback feature.

- An internal D&M presentation from 2010 given by D&M's Chief Technology Officer states, "Sonos has been ***the only successful multi-zone home audio*** solution marketed to consumers (as opposed to custom installation). ***Offerings from Logitech, Cisco and Yamaha have failed***." Ex. 6: PTX 275 at D+M 0408332 (emphasis added).
    - This evidence of failure has a nexus to the patented synchronous playback feature because it shows how multiple sophisticated companies failed to deliver a "multi-zone home audio system" and synchronous playback is a defining feature of a multi-zone home audio system.

- An internal D&M competitive research presentation from 2013 on the PURE Jongo Wireless Audio System described the system as having "***poor audio synchronization***." PTX 179 at D+M_0128194 (emphasis added). "To the average person it will sound synchronized but ***it made me dizzy***. I wonder if the engineering team has actually calculated the phase differential? ***It sounds to me like it is drifting continuously back and forth***." Ex. 8: PTX 179 at D+M0128159 (emphasis added).
    - This evidence of failure has a nexus to the patented synchronous playback feature because it describes another competitor's failure to successfully implement synchronous playback functionality.

Because the D&M and other leading companies struggled and failed to deliver multi-room audio systems with synchronous playback capability, this evidence weighs in favor of the non-obviousness of the claimed invention. *WBIP*, 829 F.3d at 1332.

VI. Conclusions

In view of the foregoing, and without conceding the merits of any of the assertions in the Request for *Ex Parte* Reexamination, the Non-Final Office Action, and the Final Office Action not explicitly addressed herein, Patentee respectfully submits that the claims are in condition for confirmation, and Patentee respectfully requests that the Office issue a reexamination certificate confirming the patentability of all the claims. If further dialog would advance prosecution, the Office is invited to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: May 16, 2018

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST TO CONSIDER OBJECTIVE EVIDENCE OF NON-OBVIOUSNESS PURSUANT TO 37 C.F.R. § 1.116(e)

Patentee has submitted objective evidence of non-obviousness from the concurrent litigation herewith pursuant to 37 C.F.R. § 1.565(a) and Patentee respectfully requests that the Office consider the objective evidence of non-obviousness pursuant to 37 C.F.R. § 1.116(e).

Under 37 C.F.R. § 1.116(e), "[a]n affidavit or other evidence submitted after a final rejection…in an *ex parte* reexamination filed under § 1.510…but before or on the same date of filing an appeal…, may be admitted upon a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented."

I. The objective evidence of non-obvious is necessary

The objective evidence of non-obviousness submitted herewith is necessary for at least the reasons that: (A) the objective evidence rebuts the assertions in the "RESPONSE TO ARGUMENTS" section in the Final Office Action and further supports the arguments in

Patentee's December 20, 2017, Response; (B) the objective evidence is from the concurrent litigation and has a bearing on the patentability of the claims, so a reasonable examiner would want to consider the evidence in view of 37 C.F.R. §§ 1.555(a) and 1.565(a) to help inform the ultimate obviousness determination; and (C) the objective evidence contradicts the third-party requestor's representations relied upon by the Office when considering whether to initiate the *ex parte* reexamination proceeding in the first instance.

A. The evidence rebuts the assertions in the Final Office Action

First, the evidence rebuts the assertions in the "RESPONSE TO ARGUMENTS" section of the Final Office Action. In particular, in the December 20, 2017, Response, Patentee explained that persons of skill in the art would not have been motivated to combine the teachings of the prior art in the manner proposed in the Office Action because, *inter alia*, the proposed "hypothetical consolidated device would be both more complex to design and more expensive to manufacture." December 20, 2017, Response, p. 30. In response, the Final Office Action states that building the hypothetical combined device to perform the claimed invention as proposed by the Office "would not require undue experimentation" and "would not be overly complicated as suggested by the PO and Wolfe's Dec." Final Office Action, p. 9. But in contrast to the assertion in the Final Office Action, the third-party requestor's own internal documents from the concurrent litigation show that building a device to perform the patented synchronous playback functions required a great deal of experimentation and was quite a complex and complicated engineering undertaking.

For example, in an internal D&M technical report from 2011 reviewing Sonos patent filings, Yuuji Kaneko (a D&M engineer) stated, "***Sonos has excellent synchronous playback feature***." Ex. 1: PTX 270, p. 2 (emphasis added). But despite having Sonos patent filings as a

roadmap, D&M estimated in a January 19, 2012, email that it would need to spend $5.33M and invest 439 man-months (70,240 man-hours, assuming a 40-hour work week) over 20 months to copy Sonos's media playback system embodying the patented synchronous playback feature. Ex. 2: PTX 198 at D+M_0161242 ("Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. The summary of the plan is 20 months, ***439 man-months***, and $5.33M.") (emphasis added). In the engineering project plan, D&M allocated ***128 man-months (20,480 hours)*** of the total development effort to implementing a copy of Sonos's patented synchronous playback feature. Ex. 3: PTX 200 at D+M_0161268.

Indeed, even with the benefit of having Sonos products to copy and Sonos patent filings to follow, D&M's engineers still could not figure out how to implement the synchronous playback function. In an internal D&M email from January 27, 2012, discussing Sonos's synchronous playback capabilities, Achim Schulz (a D&M engineer) asked, "***Do we have any idea how they can synchronize so perfectly?*** This is related to their mesh network or they have other technical advanced strategy?" Ex. 4: PTX 146 at D+M0072389 (emphasis added). In response, Hiroyuki Yazawa (another D&M engineer) stated, "As of now ***we do not have any concrete idea***, but we believe some driver level implementation is used in both of network driver and audio driver, where network drivers exchanges precise system timer (clock) information (like what defined in IEEE1588) and audio driver does some precise buffer control, though ***it's only a guess***." Ex. 4: PTX 146 at D+M0072389 (emphasis added).

D&M's engineers are unquestionably persons of ordinary skill in the art, and many arguably rise to the level of expert in the field in view of their long history of successfully developing and bring audio products to market. However, even though Sonos patent filings gave

D&M a detailed blueprint to follow, copying Sonos products took D&M's engineers a great deal of effort and experimentation as late as 2012-14 -- nearly a decade after the date of the invention. And if using Sonos patent filings as a guide to copy Sonos products was that complicated and challenging for a team of experienced engineers at a leading audio company nearly a decade after the time of the invention, then consistent with the Patentee's December 20, 2017, Response and the Wolfe Declaration, Patentee submits that modifying and combining the teachings of Blank and Gray without the benefit of a tangible product to copy and detailed instructions in a patent specification certainly would not be a trivial task as suggested in the Final Office Action.

B. A reasonable examiner would want to consider the objective evidence in view of 37 C.F.R. §§ 1.555(a) and 1.565(a) to help inform the ultimate obviousness determination

"The public interest is best served, and the most effective reexamination occurs when, at the time a reexamination proceeding is being conducted, the Office is aware of and evaluates the teachings of all information material to patentability in a reexamination proceeding." 37 C.F.R. § 1.555(a). And "[i]n an *ex parte* reexamination proceeding before the Office, the patent owner must inform the Office of any prior or concurrent proceedings in which the patent is or was involved such as interferences, reissues, *ex parte* reexaminations, *inter partes* reexaminations, or litigation and the results of such proceedings." 37 C.F.R. § 1.565(a),

Here, the evidence shows, *inter alia*, that D&M praised and copied Sonos products that embody the claimed invention. "Industry participants, especially ***competitors, are not likely to praise an obvious advance over the known art***." *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1334 (Fed. Cir. 2016). And "[t]he fact ***that a competitor copied technology suggests it would not have been obvious***." *WBIP*, 829 F.3d at 1336. In the context of obviousness, "copying requires the replication of a specific product," which "may be demonstrated either through internal

documents" and/or with manufacture of a product having "substantial similarity to, the patented product (as opposed to the patent)." *Iron Grip Barbell Co., Inc. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004) (citations omitted); *Tokai Corp. v. Easton Enterprises, Inc.*, 632 F.3d 1358, 1370 (Fed. Cir. 2011) (Copying "requires evidence of efforts to replicate a ***specific product***.") (emphasis added).

Here, the documents submitted herewith are the exact sort of "internal documents" describing a competitor's praise and copying of a patented product that has been found to be strong objective evidence of non-obviousness. *WBIP*, 829 F.3d at 1336-37 (confirming a finding of copying based on evidence "that [the accused infringer's] engineers were aware of and had access to [the patentee's product embodying the patented feature] and shortly thereafter with express reference to [the patentee's product] adopted the same features in developing [the infringing product]"). As such, Patentee submits that a reasonable examiner would want to consider this objective evidence of non-obviousness when making a final determination on the legal question of obviousness.

C. The objective evidence contradicts the third-party requestor's representations relied upon by the Office when considering whether to initiate the *ex parte* reexamination proceeding in the first instance

In its Request and Renewed Request for *Ex Parte* Reexamination, the third-party requestor asserted to the Patent Office that the challenged claims are obvious in view of various prior art references. But behind closed doors, the third-party requestor (D&M) praised the patented synchronous playback features and copied Sonos products embodying the patented synchronous playback features. *WBIP*, 829 F.3d at 1334 ("[i]ndustry participants, especially competitors, are not likely to praise an obvious advance over the known art.); *WBIP*, 829 F.3d at 1336 ("[t]he fact that a competitor copied technology suggests it would not have been obvious.")

Examples of the third-party requestor's praise for Sonos's patented synchronization feature include an internal D&M technical report from 2011 reviewing Sonos patent filings where Yuuji Kaneko (a D&M engineer) stated, "***Sonos has excellent synchronous playback feature***." Ex.: PTX 270, p. 2. (emphasis added). Also, an internal D&M presentation from 2010 given by D&M's Chief Technical Officer praised Sonos's patented synchronous playback feature, explaining that "Each zone can ***play the same music*** or different music and music playback in all 32 zones can be ***perfectly synchronized***," and "[a]s such, every Sonos Zone can act like bridge, a switch, a wireless repeater, ***a synchronized source and a synchronized player***" so "[a]s long as one Sonos device is connected to the home network via Ethernet, ***it is virtually impossible to hook to it up 'wrong'.***" Ex. 6: PTX 275 at D+M_0408322, D+M_0408330 (emphasis added). Additionally, in an internal D&M email from 2012 discussing Sonos's synchronous playback capabilities, Hiroyuki Yazawa (a D&M engineer) stated, "…***it's amazing accuracy over [an] IP network***." Ex. 4: PTX 146 at D+M0072389 (emphasis added). And in another 2012 internal D&M email, Marty Wachter (a D&M engineer) stated, "I have had Sonos in my home since 2005. I think ***their synchronization is the best I've ever heard***." Ex. 5: PTX 193 at D+M_0158702 (emphasis added).

Examples of evidence showing the third-party requestor's copying of Sonos products embodying the patented synchronous playback feature include an internal D&M presentation from 2013 containing "R&D Strategy and Requirement[s]" that identifies "Step 1" of "How to Win" is to "***Make Sonos-copy products***…" Ex. 7: PTX 180 at D+M_0129410 (emphasis added). And in an internal D&M email from 2012 outlining the third-party requestor's plan to copy Sonos products embodying the patented synchronous playback feature, Chris Commons (D&M Vice President), states, "[W]e recently completed a ***detailed analysis of the Sonos product line***

and features. Ichikawa-san sent you the summary presentation of the ***Sonos teardown***. Engineering also developed an ADS product plan for ***reproducing the Sonos functionality***. The ADS feature set details and resulting project plan are attached. ***The summary of the plan is 20 months, 439 man-months, and $5.33M***." Ex. 2: PTX 198 at D+M_0161242 (emphasis added). Indeed, as mentioned earlier, the third-party requestor allocated about 128 man-months (20,480 hours) of the total development effort to implementing a copy of Sonos's patented synchronous playback feature. Ex. 3: PTX 200 at D+M_0161268.

Because the third-party requestor's praise of the patented synchronous playback feature and copying of Sonos products embodying the patented synchronous playback feature directly contradict the third-party requestor's allegations of obviousness, Patentee submits that these documents are necessary to establish a full and accurate record for consideration by the Office.

II. The objective evidence of non-obviousness was not presented earlier because Patentee could not have reasonably submitted the evidence with the response filed on December 20, 2017

The objective evidence of non-obviousness that Patentee seeks to submit pursuant to 37 C.F.R. § 1.116 are the third-party requestor's internal documents that the third-party requestor produced in the concurrent litigation. These documents were subject to a protective order issued by the U.S. District Court for the District of Delaware, and thus, these documents were known only to the third-party requestor and Patentee's outside litigation counsel (but not the Patentee) up until Patentee's litigation counsel presented the documents at the trial that concluded on Friday, December 15, 2017, less than a week before Patentee's prosecution counsel filed the response to the Non-Final Office Action on Wednesday, December 20, 2017

The protective order in the concurrent litigation applied to the objective evidence of non-obviousness that the Patentee is requesting the Office to consider pursuant to 37 C.F.R.

§ 1.116(e) because the protective order applied to "all Protected Material, regardless of the medium or manner in which it is generated, stored, or maintained, that is produced, disclosed, or generated either by a Party or Non-party in connection with discovery or Rule 26(a) disclosures in this Action" as well as "(i) any information copied or extracted from Protected Material, (ii) any copies, excerpts, summaries, or compilations of Protected Material, and (iii) any testimony, conversations, or presentations by a Party or its Counsel that might reveal information or items that have been designated in accordance with the procedures set forth herein." Ex. 11: Protective Order, Case No. 1:14-cv-01330-WCB (D. Del., Sep. 9, 2015) at pp. 4-5.

Importantly, the third-party requestor designated each of these documents as "Highly Confidential - Attorneys' Eyes Only," which under the terms of the protective order means that the documents are "extremely sensitive 'CONFIDENTIAL' Information or Items, disclosure of which to another Party or Non-Party would create a substantial risk of serious harm that could not be avoided by less restrictive means. Such information or items may include, without limitation, pending but unpublished patent applications, information concerning research, development and other activities related to unreleased products, trade secrets, or other highly-confidential research, development, technical, financial, or commercial information." Ex. 11: Protective Order, ¶ 1.8, Case No. 1:14-cv-01330-WCB (D. Del., Sep. 9, 2015).

Because the third-party requestor designated these documents as "Highly Confidential - Attorneys' Only," the third-party requestor's documents (and the information contained therein) could be disclosed ***only*** to "a. [Sonos's] Outside Counsel of Record in this Action [(i.e., Lee Sullivan Shea & Smith LLP)], employees of such Outside Counsel to whom it is reasonably necessary to disclose, and any Professional Vendors working at the direction of such Outside Counsel; b. any Expert of [Sonos] to whom it is reasonably necessary to disclose, provided that

such Expert (i) agrees to be bound by this Protective Order by signing a copy of Exhibit A, and (ii) complies with the procedures set forth below in Section 7; c. the Court, court personnel, and jury; d. court reporters, stenographers, or videographers, as well as their staff; e. professional jury or trial consultants, their staff, and mock jurors to whom it is reasonably necessary to disclose; f. any mediator who is assigned to hear this matter, and his or her staff, subject to their agreement to maintain confidentiality to the same degree as required by this Protective Order; and g. any individual who currently has or previously had access to the Protected Material, including but not limited to any author, recipient, or custodian of the Protected Material or any individual currently employed by the Designating Party." Ex. 11: Protective Order, Case No. 1:14-cv-01330-WCB (D. Del., Sep. 9, 2015) at pp. 12-13. Importantly, these documents (and the information contained therein) could not have been disclosed to the Patentee (and were not disclosed to the Patentee) before they were presented at the trial that concluded on Friday, December 15, 2017.

The documents were no longer subject to the protective order when they were presented at the trial that ended on Friday, December 15, 2017, which was open to and attended by members of the public and reported on by the press, because, under the terms of the protective order, the protective order does "not apply to (i) any information or items that…become part of the public domain, after receipt by the Receiving Party, in a manner that does not violate this Protective Order…" Ex. 11: Protective Order, Case No. 1:14-cv-01330-WCB (D. Del., Sep. 9, 2015) at p. 5; Ex. 12: Order re Trial Procedures, Case No. 1:14-cv-01330-WCB (D. Del., Nov. 21, 2017) at p. 3, ¶ 6. The district court published a redacted "public version" of the listing of trial exhibits on Tuesday, December 19, 2017, Ex. 13: Sonos's Revised Trial Exhibit List (Pubic Version), Case No. 1:14-cv-01330-WCB (D. Del., Dec. 19, 2017) (listing nearly 700 exhibits),

and in April 2018, Patentee's outside litigation counsel provided Patentee's outside prosecution counsel with the documents that were actually used at the public trial and thus, no longer subject to the protective order. Ex. 14: Shea Dec., ¶¶ 1-6; Ex. 12: Order re Trial Procedures, Case No. 1:14-cv-01330-WCB (D. Del., Nov. 21, 2017) at p. 3, ¶ 6.

Because of the short of amount of time between the end of the trial on Friday, December 15, 2017 in the concurrent litigation and the Wednesday, December 20, 2017, due date for Patentee's response to the Non-Final Office Action, and because Patentee's prosecution counsel was not involved in the concurrent litigation and could not have known that the objective evidence of non-obviousness even existed because of the protective order, Patentee and its prosecution counsel could not have reasonably obtained and analyzed the voluminous set of trial exhibits to identify objective evidence of non-obviousness for submission with the Response filed on December 20, 2017.

III. Conclusions

In view of the foregoing, Patentee respectfully submits the objective evidence of non-obviousness pursuant to 37 C.F.R. § 1.565(a) and Patentee requests that the Office consider the objective evidence of non-obviousness submitted herewith pursuant to 37 C.F.R. § 1.116(e). If further dialog would advance consideration of the objective evidence of non-obviousness, the Office is invited to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: May 16, 2018

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

Listing of Objective Evidence of Non-Obviousness

Exhibit	Description	Category
1	PTX 270, Y. Kaneko, Patent Analysis (Nov. 3, 2011) (3 pages)	Competitor Praise
2	PTX 198, D&M email re: copying (January 29, 2012) (1 page) (D+M_0161242)	Competitor Copying
3	PTX 200, D&M Audio Distribution System Development Plan (Jan. 2012) (D+M_0161262-80)	Competitor Copying
4	PTX 146, D&M email chain re: "Sonos party delay" (4 pages) (Jan. 25-27, 2012) (D+M_0072389-92)	Competitor Praise; Failure of Others
5	PTX 193, D&M email chain re: "Sonos Streaming 8 to 1" (4 pages) (Feb. 23-24, 2012) (D+M_0158702-05)	Competitor Praise
6	PTX 275, D&M Sonos Audio System Overview (Oct. 4, 2010) (17 pages) (D+M_0408320-36)	Competitor Praise; Failure of Others
7	PTX 180, D&M Design Center Global R&D Strategy/Operation Model (Jun. 14, 2013) (29 pages) (D+M_0129406-34)	Competitor Copying
8	PTX 179, D&M Presentation re: PURE Jongo Wireless Audio System UX Review (Sep. 5, 2013) (53 pages) (D+M_128157-209)	Failure of Others

Electronic Acknowledgement Receipt	
EFS ID:	32636889
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	16-MAY-2018
Filing Date:	16-JUN-2017
Time Stamp:	21:13:54
Application Type:	Reexam (Patent Owner)

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	Information Disclosure Statement (IDS) Form (SB08)	14-1800-REX_IDS.pdf	1034949 f2200399dcca1f86482058ce9e432170c60e710c	no	4

Warnings:

Information:					
A U.S. Patent Number Citation or a U.S. Publication Number Citation is required in the Information Disclosure Statement (IDS) form for autoloading of data into USPTO systems. You may remove the form to add the required data in order to correct the Informational Message if you are citing U.S. References. If you chose not to include U.S. References, the image of the form will be processed and be made available within the Image File Wrapper (IFW) system. However, no data will be extracted from this form. Any additional data such as Foreign Patent Documents or Non Patent Literature will be manually reviewed and keyed into USPTO systems.					
2	Non Patent Literature	Ex01_PTX270_DM_Internal_Eval.pdf	64775 03326e11ad4f37b47c7a2697c86513c493dfbe7e	no	3
Warnings:					
Information:					
3	Non Patent Literature	Ex02_PTX198_Commons_Schulz_Email.pdf	509577 974b9f00eebc3ba80ddef1e88606c8d22e9c3a79	no	1
Warnings:					
Information:					
4	Non Patent Literature	Ex03_PTX200_DM_Audio_Distribution_System_Development_Plan.pdf	5408890 c0164202ce12ce752c6d43c65257de11f8069d44	no	19
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
5	Non Patent Literature	Ex04_PTX146_Schulz_Yazawa_Email.pdf	3513363 cfc5aa6235421855cd2c373b7fb01fcc39665ddc	no	4
Warnings:					
Information:					
6	Non Patent Literature	Ex05_PTX193_Wachter_Fukuzuka_Email.pdf	3834395 1adbe8a153881e3499a67d836088cd00c6e49788	no	4
Warnings:					
Information:					
7	Non Patent Literature	Ex06_PTX275_Sonos_Audio_System_Overview.pdf	8592116 e1ba431ea277c1017dcd99ab5532f652c76a76b0	no	17
Warnings:					
Information:					

8	Non Patent Literature	Ex07_PTX180_Design_Center_Global.pdf	2463077 1366579f940c561f4fc1f66e6eb4f7c6bd533644	no	29
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
9	Non Patent Literature	Ex08_PTX179_Pure_Jongo_Wireless.pdf	13899003 5c82c39cda1c17e18238a692213eaaf756b38417	no	53
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
10	Applicant summary of interview with examiner	04-0401-REEXAM_Interview_Summary.pdf	82631 eb8f58a412c418b357bc2ce2353ed43156b544cb	no	1
Warnings:					
Information:					
11	Reexam Certificate of Service	04-0401-REEXAM_Certificate_of_Service.pdf	78483 600f83a42e7fbbb0828ce5193918c06a64fdc1d1	no	1
Warnings:					
Information:					
12		04-0401-REEXAM_Response.pdf	244802 5c07a7b47c958f70babfd1ff25d2280576d66d0f	yes	26

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Reexam Response to Final Rejection	1	1
	Claims	2	6
	Response After Final Action	7	26

Warnings:
Information:

13	Patent Owner Comments after Action Closing Prosecution	04-0401-REEXAM_37_CFR_1_116_Request.pdf	164864 30752d82d3337bd1775dcd4cf5d66952de933ac7	no	11
Warnings:					
Information:					
14	Patent Owner Comments after Action Closing Prosecution	Exhibits_1_through_7.pdf	17041715 0098458042897f522cc662ba20ed22ec3d8c1259	no	84
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
15	Patent Owner Comments after Action Closing Prosecution	Exhibits_8_through_14.pdf	12542081 ddb58ee3d7c0cdb732407a0b2424abc984e188ee	no	148
Warnings:					
The page size in the PDF is too large. The pages should be 8.5 x 11 or A4. If this PDF is submitted, the pages will be resized upon entry into the Image File Wrapper and may affect subsequent processing					
Information:					
		Total Files Size (in bytes):	69474721		

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	90013959
	Filing Date	2017-06-16
	First Named Inventor	Nicholas Millington
	Art Unit	3992
	Examiner Name	David E. England
	Attorney Docket Number	04-0401-REEXAM

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	90013959
	Filing Date	2017-06-16
	First Named Inventor	Nicholas Millington
	Art Unit	3992
	Examiner Name	David E. England
	Attorney Docket Number	04-0401-REEXAM

	1	PTX 270, Y. Kaneko; D&M Internal Evaluation of Sonos US Patent No. 8020023 and US Publication No. 2007/0038999 A1, Nov. 3, 2011, 3 pages.
	2	PTX 198, Commons to Schulz et al. email entitled "ADS Product Planning - Fundamental Design and Feature Issues", sent Jan. 19, 2012, D+M_0161242, 1 page.
	3	PTX 200, D&M Audio Distribution System Development Plan, CE Engineering and MDC, 2012, D+M_0161262-80, 19 pages.
	4	PTX 146, Schulz to Ichikawa et al. email entitled "Sonos party delay", sent Jan. 25-27, 2012, D+M_0072389-92, 4 pages.
	5	PTX 193, Wachter to Fukuzuka et al. email entitled "Sonos Streaming 8 to 1", sent Feb. 23-24, 2012, D +M_0158702-05, 4 pages.
	6	PTX 275, B. Sepaniak; D&M Sonos Audio System Overview, Oct. 4, 2010, D+M_0408320-36, 17 pages.
	7	PTX 180, D&M Design Center Global R&D Strategy/Operation Model, Discussion Material ver. 0.7, Jun. 14, 2013, D+M_0129406-34, 29 pages.
	8	PTX 179, M. Wachter; D&M Presentation entitled "PURE Jongo Wireless Audio System UX Review", Sept. 5, 2013, D+M_0128157-209, 53 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	90013959
	Filing Date	2017-06-16
	First Named Inventor	Nicholas Millington
	Art Unit	3992
	Examiner Name	David E. England
	Attorney Docket Number	04-0401-REEXAM

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	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2018-05-16
Name/Print	Jeffrey P. Armstrong	Registration Number	54,967

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
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

PATENTEE'S SUMMARY OF THE EXAMINER INTERVIEW ON MAY 9, 2018

An examiner interview took place via video conference on May 9, 2018. Participants included Examiners David England, Roland Foster, and Michael Fuelling and Patentee's representatives, Chris Butts and Jeff Armstrong. During the interview, the participants discussed claim 9, the § 103 rejections in the Office Action, the Blank and Gray references, and objective evidence of non-obviousness from the concurrent litigation. No agreement on the claims was reached. Patentee agreed to file (i) a response to the Final Office Action with detailed rebuttals to the Office's responses in the Final Office to the Patentee's arguments submitted in the December 20, 2017 Response, and (ii) a detailed showing under 37 C.F.R. § 1.116(e) with reasons for considering the objective evidence of non-obvious from the concurrent litigation.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: May 16, 2018

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that copies of the Response to the Final Office Action, the 37 CFR 1.116(e) Request, Exhibits 1-14, the Interview Summary, the Information Disclosure Statement, the non-patent literature references cited in the Information Disclosure Statement, and this Certificate of Service, all of which were filed at the U.S. Patent Office on May 16, 2018, are being served, in their entirety, via Federal Express, upon the following third-party requestor:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: May 16, 2018

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

Litigation Search Report CRU 3999

Reexam Control No. 90/013,959

TO: David England
Location: CRU
Art Unit: 3992
Date: May 10, 2018

U.S. Patent Number: 9,213,357

From: Patricia Martin
Paralegal Specialist
Location: CRU 3999
Phone: (571) 272-7705

Search Notes

1) I performed a search on the patent in Lexis Court Link for any open dockets or closed cases.

2) I performed a Key Cite Search in Westlaw, which retrieves all history on the patent including any litigation.

3) I performed a search in Lexis in the Federal Courts and Administrative Materials databases for any cases found.

4) I performed a search in Lexis in the IP Journal and Periodicals database for any articles on the patent.

5) I performed a search in Lexis in the news databases for any articles about the patent or any articles about litigation on this patent.

No Litigation was found

Citing References (47)

Treatment	Title	Date	Type	Depth	Headnote(s)
Examined by	**1. Jury Trial Demanded** Out Of Plan SONOS, INC., Plaintiff, v. D&M HOLDINGS INC. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC, Defendants. 2017 WL 6999670, *1+ , D.Del. (Trial Pleading)	Sep. 28, 2017	Petition		—
Examined by	**2. Supplemental Third Amended Complaint for Patent Infringement** Out Of Plan SONOS, INC., Plaintiff, v. D&M HOLDINGS INC. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC, Defendants. 2017 WL 2991848, *1+ , D.Del. (Trial Pleading)	Apr. 21, 2017	Petition		—
Cited by	**3. Plaintiff Sonos, Inc.'s Supplemental Opening Brief on Claim Construction** Out Of Plan SONOS, INC., Plaintiff, v. D&M HOLDINGS INC. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC, Defendants. 2017 WL 2991862, *1+ , D.Del. (Trial Motion, Memorandum and Affidavit)	Mar. 03, 2017	Motion		—
Mentioned by	**4. Defendants' Response in Opposition to Plaintiff's Motion to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f)** Out Of Plan SONOS, INC., Plaintiff, v. D&M HOLDINGS INC. d/b/a the D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC, Defendants. 2016 WL 4771470, *1 , D.Del. (Trial Motion, Memorandum and Affidavit)	May 09, 2016	Motion		—
—	**5. NETWORK DIGITAL AUDIO SYSTEM HAS ONE TASK SOURCE PROCESSOR AND SEVERAL MEMBER PROCESSORS, SUCH THAT EACH MEMBER PROCESSOR DETERMINES ITS TASK EXECUTION TIME BASED ON CURRENT TIME VALUE INDICATED BY SOURCE PROCESSOR** Out Of Plan DWPI 2005-172844	July 28, 2003	DWPI	—	—
—	**6. RF 038329/0253** Out Of Plan	Apr. 01, 2016	Assignments	—	—
—	**7. RF 035518/0127** Out Of Plan	Apr. 28, 2015	Assignments	—	—
—	**8. PatStat 9213357**	Aug. 01, 2017	Patent Status Files	—	—
—	**9. PLAYBACK DEVICE CONNECTION** Out Of Plan US PAT 9960969+ , U.S. PTO Utility Techniques for automatically configuring necessary parameters of a device to be coupled to a network with minimum human intervention are disclosed. In one embodiment, a wired...	May 01, 2018	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**10. AUDIO DATA BUFFERING** Out Of Plan US PAT 9928024 , U.S. PTO Utility A method of buffering audio data in an audio playback system that is adapted to receive and playback separate, discrete audio files from one or more audio sources, where the audio...	Mar. 27, 2018	Patents	—	—
—	**11. MAKING AND INDICATING A STEREO PAIR** Out Of Plan US PAT 9928026+ , U.S. PTO Utility An example method includes, based on an adjustment to a first displayed volume control, instructing the first playback device to adjust playback volume level; based on an...	Mar. 27, 2018	Patents	—	—
—	**12. WIRELESS AUDIO SYNCHRONIZATION** Out Of Plan US PAT 9911433 , U.S. PTO Utility A method of synchronizing playback of audio data sent over a first wireless network from an audio source to a wireless speaker package that is adapted to play the audio data. The...	Mar. 06, 2018	Patents	—	—
—	**13. INDICATOR ON A NETWORK DEVICE** Out Of Plan US PAT 9866447+ , U.S. PTO Utility Systems, methods, and apparatus for connection of a device to a network are disclosed. In an example, a playback device includes an amplifier, a speaker, a button, a light...	Jan. 09, 2018	Patents	—	—
—	**14. ZONE CONFIGURATIONS MAINTAINED BY PLAYBACK DEVICE** Out Of Plan US PAT 9860657+ , U.S. PTO Utility Systems and methods to control a plurality of multimedia players in one or more groups are disclosed. For example, in a network including a plurality of independent playback...	Jan. 02, 2018	Patents	—	—
—	**15. ZONE CONFIGURATION BASED ON PLAYBACK SELECTIONS** Out Of Plan US PAT 9813827+ , U.S. PTO Utility An example method includes displaying zone names via a display interface. Each zone name represents a respective particular zone of a plurality of zones, and each zone contains at...	Nov. 07, 2017	Patents	—	—
—	**16. SYSTEM WITH SPEAKER, TRANSCEIVER AND RELATED DEVICES** Out Of Plan US PAT 9807527 , U.S. PTO Utility An audio system includes a base station, an interface that enables wireless transmission of audio content from a handheld media device to the base station, and one or more remote...	Oct. 31, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**17. CLOCK SYNCHRONIZATION FOR AUDIO PLAYBACK DEVICES** Out Of Plan US PAT 9798515 , U.S. PTO Utility A method is provided for synchronizing clocks on a plurality of audio playback devices. The method includes receiving a broadcast/multicast acknowledgement packet from a...	Oct. 24, 2017	Patents	—	—
—	**18. AUDIO OUTPUT BALANCING** Out Of Plan US PAT 9794707+ , U.S. PTO Utility Systems and methods are provided herein for balancing of outputs from playback devices playing audio content in synchrony. In one embodiment, the balancing of outputs may involve...	Oct. 17, 2017	Patents	—	—
—	**19. ESTABLISHING A SECURE WIRELESS NETWORK WITH A MINIMUM HUMAN INTERVENTION** Out Of Plan US PAT 9787550+ , U.S. PTO Utility An example method disclosed herein includes receiving, at a controller device, a user input; based on the user input, displaying a prompt to direct a user to press one or more...	Oct. 10, 2017	Patents	—	—
—	**20. CEASING PLAYBACK AMONG A PLURALITY OF PLAYBACK DEVICES** Out Of Plan US PAT 9778897+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Oct. 03, 2017	Patents	—	—
—	**21. RESYNCHRONIZATION OF PLAYBACK DEVICES** Out Of Plan US PAT 9778898+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Oct. 03, 2017	Patents	—	—
—	**22. CAUSING A DEVICE TO JOIN A SYNCHRONY GROUP** Out Of Plan US PAT 9778900+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Oct. 03, 2017	Patents	—	—
—	**23. AUDIO OUTPUT BALANCING** Out Of Plan US PAT 9781513+ , U.S. PTO Utility Systems and method are provided herein for balancing of outputs from playback devices playing audio content in synchrony. In one embodiment, the balancing of outputs may involve...	Oct. 03, 2017	Patents	—	—
—	**24. PAIR VOLUME CONTROL** Out Of Plan US PAT 9766853+ , U.S. PTO Utility An example method includes, based on an adjustment to a first displayed volume control, instructing the first playback device to adjust playback volume level; based on an...	Sep. 19, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**25. MULTI-CHANNEL PAIRING IN A MEDIA SYSTEM** Out Of Plan US PAT 9756424+ , U.S. PTO Utility Systems and methods for output of audio content are disclosed. An example first playback device includes a processor. The example processor is configured to at least process audio...	Sep. 05, 2017	Patents	—	—
—	**26. CONFIGURATION BASED ON SPEAKER ORIENTATION** Out Of Plan US PAT 9748646+ , U.S. PTO Utility Systems, methods, and apparatus to shape sound based on a speaker orientation. An example playback device includes a network interface; a processor; and a memory including...	Aug. 29, 2017	Patents	—	—
—	**27. FREQUENCY ROUTING BASED ON ORIENTATION** Out Of Plan US PAT 9748647+ , U.S. PTO Utility Systems, methods, and apparatus for frequency routing based on orientation are disclosed. An example method includes receiving, by a playback device, an audio data stream. The...	Aug. 29, 2017	Patents	—	—
—	**28. UPDATING ZONE CONFIGURATION IN A MULTI- ZONE MEDIA SYSTEM** Out Of Plan US PAT 9749760+ , U.S. PTO Utility An example method includes receiving, from a first playback device of a playback system, a message indicating a first zone configuration, the first zone configuration including at...	Aug. 29, 2017	Patents	—	—
—	**29. OBTAINING CONTENT FROM MULTIPLE REMOTE SOURCES FOR PLAYBACK** Out Of Plan US PAT 9740453+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 22, 2017	Patents	—	—
—	**30. OBTAINING CONTENT FROM LOCAL AND REMOTE SOURCES FOR PLAYBACK** Out Of Plan US PAT 9733891+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 15, 2017	Patents	—	—
—	**31. OBTAINING CONTENT BASED ON CONTROL BY MULTIPLE CONTROLLERS** Out Of Plan US PAT 9733892+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 15, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**32. OBTAINING AND TRANSMITTING AUDIO** Out Of Plan US PAT 9733893+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 15, 2017	Patents	—	—
—	**33. SYSTEMS AND METHODS FOR SYNCHRONIZING OPERATIONS AMONG A PLURALITY OF INDEPENDENTLY CLOCKED DIGITAL DATA PROCESSING DEVICES THAT INDEPENDENTLY SOURCE DIGITAL DATA** Out Of Plan US PAT 9734242+ , U.S. PTO Utility In a system for distributing data, distribution device is configured to distribute timestamp, offset and source location information for a digital data stream to an execution...	Aug. 15, 2017	Patents	—	—
—	**34. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK** Out Of Plan US PAT 9727302+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 08, 2017	Patents	—	—
—	**35. RESUMING SYNCHRONOUS PLAYBACK OF CONTENT** Out Of Plan US PAT 9727303+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 08, 2017	Patents	—	—
—	**36. OBTAINING CONTENT FROM DIRECT SOURCE AND OTHER SOURCE** Out Of Plan US PAT 9727304+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Aug. 08, 2017	Patents	—	—
—	**37. INTELLIGENTLY INCREASING THE SOUND LEVEL OF PLAYER** Out Of Plan US PAT 9729115+ , U.S. PTO Utility Techniques for optimizing a player based on the addition of a second player are disclosed. In an embodiment, when a first player no longer needs to play certain audio frequencies...	Aug. 08, 2017	Patents	—	—
—	**38. SMART-LINE IN PROCESSING** Out Of Plan US PAT 9686606+ , U.S. PTO Utility 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...	June 20, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**39. SMART LINE-IN PROCESSING IN A GROUP** Out Of Plan US PAT 9681223+ , U.S. PTO Utility Technology for smart line-in processing in an audio environment is disclosed. An example playback device includes a line-in connector for receiving a first audio signal, a network...	June 13, 2017	Patents	—	—
—	**40. OBTAINING CONTENT BASED ON CONTROL BY MULTIPLE CONTROLLERS** Out Of Plan US PAT 9665343+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	May 30, 2017	Patents	—	—
—	**41. RESUMING SYNCHRONOUS PLAYBACK OF CONTENT** Out Of Plan US PAT 9658820+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	May 23, 2017	Patents	—	—
—	**42. OBTAINING CONTENT FROM MULTIPLE REMOTE SOURCES FOR PLAYBACK** Out Of Plan US PAT 9569170 , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Feb. 14, 2017	Patents	—	—
—	**43. OBTAINING CONTENT FROM LOCAL AND REMOTE SOURCES FOR PLAYBACK** Out Of Plan US PAT 9569171 , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Feb. 14, 2017	Patents	—	—
—	**44. RESUMING SYNCHRONOUS PLAYBACK OF CONTENT** Out Of Plan US PAT 9569172+ , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Feb. 14, 2017	Patents	—	—
—	**45. OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK** Out Of Plan US PAT 9563394 , U.S. PTO Utility A system is described for maintaining synchrony of operations among a plurality of devices that have independent clocking arrangements. The system includes a task distribution...	Feb. 07, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

Treatment	Title	Date	Type	Depth	Headnote(s)
—	**46. AUDIO OUTPUT BALANCING** Out Of Plan US PAT 9549258 , U.S. PTO Utility An example implementation involves a first playback device receiving audio content to be played back by the first playback device and a second playback device in synchrony. Such...	Jan. 17, 2017	Patents	—	—
—	**47. AUDIO OUTPUT BALANCING** Out Of Plan US PAT 9544707 , U.S. PTO Utility An example implementation involves a first playback device receiving audio content to be played back by the first playback device and a second playback device in synchrony. The...	Jan. 10, 2017	Patents	—	—

WESTLAW © 2018 Thomson Reuters. No claim to original U.S. Government Works.

LexisNexis® CourtLink®

Switch Client | My Briefcase | Order Runner Documents | Lexis Advance | Sign Out |
Welcome, Patricia Martin

Single Search - with Terms and Connectors

Enter keywords - Search multiple dockets & documents Search Info

My CourtLink | Search | Dockets & Documents | Track | Alert | Strategic Profiles | Breaking Complaints | My Account | Court Info

Search > Patent Search > Searching

Patent Search 8,213,357 5/10/2018

No cases found.

Return to Search

(Charges for search still apply)

LexisNexis® | About LexisNexis | Terms & Conditions | Pricing | Privacy | Customer Support - 1-888-311-1966 | Copyright © 2018 LexisNexis®. All rights reserved.

US District Court Civil Docket

U.S. District - Delaware
(Wilmington)

1:14cv1330

Sonos Inc. v. D&M Holdings Inc. et al

This case was retrieved from the court on Thursday, May 10, 2018

Date Filed:	10/21/2014		
Assigned To:	Judge William C. Bryson	Class Code:	OPEN
Referred To:		Closed:	
Nature of suit:	Patent (830)	Statute:	35:271
Cause:	Patent Infringement	Jury Demand:	Plaintiff
Lead Docket:	None	Demand Amount:	$0
Other Docket:	1:16cv00141	NOS Description:	Patent
Jurisdiction:	Federal Question		

Litigants	Attorneys
Sonos Inc. Plaintiff	Philip A. Rovner LEAD ATTORNEY; ATTORNEY TO BE NOTICED Potter Anderson & Corroon, LLP 1313 N. Market St., Hercules Plaza, 6th Flr. P.O. Box 951 Wilmington , DE 19899-0951 USA (302) 984-6000 Email: Provner@potteranderson.Com Cole B. Richter PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Richter@ls3ip.Com George I. Lee PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Lee@ls3ip.Com Jae Y. Pak PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Pak@ls3ip.Com John D. Smith , III PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Smith@ls3ip.Com

LINKPLAY EXHIBIT 1004
Page 311 of 4822

	Jonathan A. Choa ATTORNEY TO BE NOTICED Potter Anderson & Corroon, LLP 1313 N. Market St., Hercules Plaza, 6th Flr. P.O. Box 951 Wilmington , DE 19899-0951 USA 302-984-6189 Email:Jchoa@potteranderson.Com Michael P. Boyea PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Boyea@ls3ip.Com Rory P. Shea PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Shea@ls3ip.Com Sean M. Sullivan PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Sullivan@ls3ip.Com
D&M Holdings Inc. doing business as D+M Group Defendant	Christopher J. Rourk PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Crourk@jw.Com Matthew C. Acosta PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Macosta@jw.Com Michael J. Flynn ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email:Mflynn@mnat.Com Robert P. Latham PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Blatham@jw.Com Wasif Qureshi PRO HAC VICE;ATTORNEY TO BE NOTICED Email:Wqureshi@jw.Com
D&M Holdings U.S. Inc. Defendant	Jack B. Blumenfeld LEAD ATTORNEY;ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street

LINKPLAY EXHIBIT 1004
Page 312 of 4822

P.O. Box 1347
Wilmington , DE 19899
USA
(302) 658-9200
Email: Jbbefiling@mnat.Com

Blake T. Dietrich
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Bdietrich@jw.Com

Christopher J. Rourk
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Crourk@jw.Com

John M. Jackson
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Jjackson@jw.Com

Michael J. Flynn
ATTORNEY TO BE NOTICED
Morris, Nichols, Arsht & Tunnell LLP
1201 North Market Street
P.O. Box 1347
Wilmington , DE 19899
USA
302-351-9661
Fax: 302-498-6217
Email: Mflynn@mnat.Com

Robert P. Latham
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Blatham@jw.Com

Wasif Qureshi
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Wqureshi@jw.Com

Denon Electronics (Usa) Llc
Defendant

Jack B. Blumenfeld
LEAD ATTORNEY; ATTORNEY TO BE NOTICED
Morris, Nichols, Arsht & Tunnell LLP
1201 North Market Street
P.O. Box 1347
Wilmington , DE 19899
USA
(302) 658-9200
Email: Jbbefiling@mnat.Com

Christopher J. Rourk
PRO HAC VICE; ATTORNEY TO BE NOTICED

Email: Crourk@jw.Com

Michael J. Flynn
ATTORNEY TO BE NOTICED
Morris, Nichols, Arsht & Tunnell LLP
1201 North Market Street

LINKPLAY EXHIBIT 1004
Page 313 of 4822

	P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email: Mflynn@mnat.Com Robert P. Latham PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Blatham@jw.Com Wasif Qureshi PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Wqureshi@jw.Com
D&M Holdings U.S. Inc. Counter Claimant	Jack B. Blumenfeld LEAD ATTORNEY; ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200 Email: Jbbefiling@mnat.Com Blake T. Dietrich ATTORNEY TO BE NOTICED Email: Bdietrich@jw.Com John M. Jackson ATTORNEY TO BE NOTICED Email: Jjackson@jw.Com Michael J. Flynn ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email: Mflynn@mnat.Com
D&M Holdings Inc. Counter Claimant	Michael J. Flynn ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email: Mflynn@mnat.Com

LINKPLAY EXHIBIT 1004
Page 314 of 4822

Denon Electronics (Usa) Llc Counter Claimant	Jack B. Blumenfeld LEAD ATTORNEY; ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA (302) 658-9200 Email: Jbbefiling@mnat.Com Michael J. Flynn ATTORNEY TO BE NOTICED Morris, Nichols, Arsht & Tunnell LLP 1201 North Market Street P.O. Box 1347 Wilmington , DE 19899 USA 302-351-9661 Fax: 302-498-6217 Email: Mflynn@mnat.Com
Sonos Inc. Counter Defendant	Philip A. Rovner LEAD ATTORNEY; ATTORNEY TO BE NOTICED Potter Anderson & Corroon, LLP 1313 N. Market St., Hercules Plaza, 6th Flr. P.O. Box 951 Wilmington , DE 19899-0951 USA (302) 984-6000 Email: Provner@potteranderson.Com George I. Lee PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Lee@ls3ip.Com John D. Smith , III PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Smith@ls3ip.Com Jonathan A. Choa ATTORNEY TO BE NOTICED Potter Anderson & Corroon, LLP 1313 N. Market St., Hercules Plaza, 6th Flr. P.O. Box 951 Wilmington , DE 19899-0951 USA 302-984-6189 Email: Jchoa@potteranderson.Com Michael P. Boyea ATTORNEY TO BE NOTICED Email: Boyea@ls3ip.Com Rory P. Shea PRO HAC VICE; ATTORNEY TO BE NOTICED Email: Shea@ls3ip.Com

LINKPLAY EXHIBIT 1004
Page 315 of 4822

Sean M. Sullivan
PRO HAC VICE;ATTORNEY TO BE NOTICED

Email:Sullivan@ls3ip.Com

Date	#	Proceeding Text	Source
10/21/2014	1	COMPLAINT FOR PATENT INFRINGEMENT - filed with Jury Demand against D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC - Magistrate Consent Notice to Pltf. (Filing fee $ 400.00, receipt number 0311-1611477.) - filed by Sonos Inc.. (Attachments: # 1 Exhibits A-D, # 2 Exhibits E-F, # 3 Exhibit G, # 4 Exhibits H-K, # 5 Exhibit L, # 6 Exhibits M-O, # 7 Exhibits P-R, # 8 Civil Cover Sheet)(etg,) (Entered: 10/21/2014)	
10/21/2014	2	Notice, Consent and Referral forms re: U.S. Magistrate Judge jurisdiction. (etg,) (Entered: 10/21/2014)	
10/21/2014	3	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) U.S. 8,788,080 B1; U.S. 7,571,014 B1; U.S. 8,588,949 B2; U.S. D559,197 S. (etg,) (Entered: 10/21/2014)	
10/21/2014	4	Disclosure Statement pursuant to Rule 7.1: No Parents or Affiliates Listed filed by Sonos Inc. (etg,) (Entered: 10/21/2014)	
10/21/2014		No Summons Issued. (etg,) (Entered: 10/21/2014)	
10/29/2014		Case Assigned to Judge Richard G. Andrews. Please include the initials of the Judge (RGA) after the case number on all documents filed. (rjb) (Entered: 10/29/2014)	
11/19/2014	5	NOTICE of withdrawal of McDonnell Boehnen Hulbert & Berghoff LLP as counsel for plaintiff by Sonos Inc. re 1 Complaint, (Rovner, Philip) (Entered: 11/19/2014)	
12/17/2014		Summons Issued with Magistrate Consent Notice attached as to D&M Holdings U.S. Inc. on 12/17/2014; Denon Electronics (USA) LLC on 12/17/2014. (rbe) (Entered: 12/17/2014)	
12/17/2014	6	FIRST Amended Complaint For Patent Infringement against All Defendants - filed by Sonos Inc.. (Attachments: # 1 Exhibits A-D, # 2 Exhibits E-F, # 3 Exhibit G, # 4 Exhibits H-K, # 5 Exhibit L, # 6 Exhibits M-O, # 7 Exhibits P-R, # 8 Exhibit S, # 9 Exhibit T)(Rovner, Philip) Modified on 12/18/2014 (nms). (Entered: 12/17/2014)	
12/17/2014	7	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 7,792,311 B1; US 7,805,682 B1; . (Rovner, Philip) (Entered: 12/17/2014)	
12/18/2014	8	SUMMONS Returned Executed by Sonos Inc.. Denon Electronics (USA) LLC served on 12/18/2014, answer due 1/8/2015. (Rovner, Philip) (Entered: 12/18/2014)	
12/18/2014	9	SUMMONS Returned Executed by Sonos Inc.. D&M Holdings U.S. Inc. served on 12/18/2014, answer due 1/8/2015. (Rovner, Philip) (Entered: 12/18/2014)	
12/22/2014		Summons Issued with Magistrate Consent Notice attached as to D&M Holdings Inc. on 12/22/2014. (rwc) (Entered: 12/22/2014)	
12/22/2014	10	PRAECIPE filed by Philip A. Rovner on behalf of Sonos Inc. requesting Clerk to issue Rule 4(f)(2)(C)(ii) service for D&M Holdings Inc. d/b/a The D+M Group. (Rovner, Philip) Modified on 12/23/2014 (nms). (Entered: 12/22/2014)	
12/22/2014	11	AFFIDAVIT of Philip A. Rovner re 10 Praecipe re service on D&M Holdings Inc. d/b/a The D+M Group, filed by Sonos Inc.. (Rovner, Philip) Modified on 12/22/2014 (nms). (Entered: 12/22/2014)	

LINKPLAY EXHIBIT 1004
Page 316 of 4822

12/23/2014	12	Postal Receipt(s) for the mailing of process to D&M Holdings Inc. (aah) (Entered: 12/23/2014)
12/24/2014	13	MOTION for Pro Hac Vice Appearance of Attorney John M. Jackson of Jackson Walker, LLP - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) Modified on 1/4/2015 (nms). (Entered: 12/24/2014)
01/02/2015	14	STIPULATION TO EXTEND TIME for Defendants D&M Holdings U.S. Inc. and Denon Electronics (USA), LLC to Respond to Complaint to February 9, 2015 - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 01/02/2015)
01/04/2015		SO ORDERED, re 13 MOTION for Pro Hac Vice Appearance of Attorney John M. Jackson of JACKSON WALKER, LLP filed by Denon Electronics (USA) LLC, D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 1/4/2015. (nms) (Entered: 01/04/2015)
01/05/2015		SO ORDERED, re 14 STIPULATION TO EXTEND TIME for Defendants D&M Holdings U.S. Inc. and Denon Electronics (USA), LLC to Respond to Complaint to February 9, 2015, filed by Denon Electronics (USA) LLC, D&M Holdings U.S. Inc.(Reset Answer Deadlines: D&M Holdings U.S. Inc. answer due 2/9/2015; Denon Electronics (USA) LLC answer due 2/9/2015). Signed by Judge Richard G. Andrews on 1/5/2015. (nms) (Entered: 01/05/2015)
01/06/2015		Pro Hac Vice Attorney John M. Jackson for D&M Holdings U.S. Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (rbe) (Entered: 01/06/2015)
01/26/2015	15	MOTION for Pro Hac Vice Appearance of Attorney George I. Lee, Esq., Sean M. Sullivan, Esq., Rory P. Shea, Esq., John Dan Smith, III, Esq. - filed by Sonos Inc.. (Rovner, Philip) (Entered: 01/26/2015)
01/26/2015		SO ORDERED, re 15 MOTION for Pro Hac Vice Appearance of Attorney George I. Lee, Esq., Sean M. Sullivan, Esq., Rory P. Shea, Esq., John Dan Smith, III, Esq. filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 1/26/2015. (nms) (Entered: 01/26/2015)
01/29/2015		Pro Hac Vice Attorney George I. Lee,Sean M. Sullivan,Rory P. Shea,John D. Smith, III for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (dmp,) (Entered: 01/29/2015)
02/09/2015	16	MOTION to Dismiss - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 02/09/2015)
02/09/2015	17	OPENING BRIEF in Support re 16 MOTION to Dismiss, filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Answering Brief/Response due date per Local Rules is 2/26/2015. (Blumenfeld, Jack) Modified on 2/9/2015 (nms). (Entered: 02/09/2015)
02/09/2015	18	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent D&M Holdings Inc. for D&M Holdings U.S. Inc., Denon Electronics (USA) LLC filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 02/09/2015)
02/13/2015	19	MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 2/13/2015 (nms). (Entered: 02/13/2015)
02/13/2015	20	[SEALED] OPENING BRIEF in Support re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Answering

LINKPLAY EXHIBIT 1004
Page 317 of 4822

		Brief/Response due date per Local Rules is 3/2/2015. (Flynn, Michael) (Entered: 02/13/2015)
02/13/2015	21	[SEALED] DECLARATION re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A & B)(Flynn, Michael) (Entered: 02/13/2015)
02/13/2015	22	DECLARATION re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A - E)(Flynn, Michael) (Entered: 02/13/2015)
02/13/2015	23	[SEALED] DECLARATION re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A) (Flynn, Michael) (Entered: 02/13/2015)
02/17/2015	24	REDACTED VERSION of 20 Opening Brief in Support, by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 2/18/2015 (nms). (Entered: 02/17/2015)
02/17/2015	25	REDACTED VERSION of 21 Declaration of Blake DeSimone, by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-B)(Flynn, Michael) Modified on 2/18/2015 (nms). (Entered: 02/17/2015)
02/17/2015	26	REDACTED VERSION of 23 Declaration of David Meisels, by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A)(Flynn, Michael) Modified on 2/18/2015 (nms). (Entered: 02/17/2015)
02/23/2015	27	STIPULATION TO EXTEND TIME time to file opposition to Motion to Disqualify and time for defendants to file reply brief to motion to disqualify (D.I. 19) to March 16, 2015 and April 2, 2015 - filed by Sonos Inc.. (Rovner, Philip) Modified on 2/24/2015 (nms). (Entered: 02/23/2015)
02/24/2015		SO ORDERED, re 27 STIPULATION TO EXTEND TIME time for plaintiff to file opposition to Motion to Disqualify and time for defendants to file reply brief to Motion to Disqualify (D.I. 19) to March 16, 2015, and April 2, 2015, filed by Sonos Inc. (Reset Briefing Schedule: re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto. Answering Brief due 3/16/2015, Reply Brief due 4/2/2015). Signed by Judge Richard G. Andrews on 2/24/2015. (nms) (Entered: 02/24/2015)
02/26/2015	28	ANSWERING BRIEF in Opposition re 16 MOTION to Dismiss, filed by Sonos Inc..Reply Brief due date per Local Rules is 3/9/2015. (Rovner, Philip) Modified on 3/3/2015 (nms). (Entered: 02/26/2015)
02/27/2015	29	MOTION to Amend 6 Amended Complaint - filed by Sonos Inc.. (Attachments: # 1 Exhibit A - Second Amended Complaint, # 2 Exhibits A-D, # 3 Exhibits E-F, # 4 Exhibit G, # 5 Exhibits H-K, # 6 Exhibit L, # 7 Exhibits M-O, # 8 Exhibits P-R, # 9 Exhibit S, # 10 Exhibit T, # 11 Exhibit U, # 12 Exhibit V, # 13 Exhibit W, # 14 Exhibit X, # 15 Exhibit Y, # 16 Exhibit Z, # 17 Exhibit - Redline Version)(Rovner, Philip) Modified on 3/3/2015 (nms). (Entered: 02/27/2015)
02/27/2015		Set Answering Brief Deadline re 29 MOTION to Amend 6 Amended Complaint. Answering Brief/Response due date per Local Rules is 3/16/2015. (nms) (Entered: 03/03/2015)
03/09/2015	30	STIPULATION and Order regarding Second Amended Complaint, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics

LINKPLAY EXHIBIT 1004
Page 318 of 4822

		(USA) LLC. (Blumenfeld, Jack) Modified on 3/9/2015 (nms). (Entered: 03/09/2015)
03/09/2015		SO ORDERED, re 30 Stipulation and Order regarding Amended Complaint, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc. (Reset Answer Deadlines: D&M Holdings Inc. answer due 4/30/2015; D&M Holdings U.S. Inc. answer due 4/30/2015; Denon Electronics (USA) LLC answer due 4/30/2015). Signed by Judge Richard G. Andrews on 3/9/2015. (nms) (Entered: 03/09/2015)
03/09/2015	31	SECOND AMENDED COMPLAINT for Patent Infringement against D&M Holdings Inc., D&M Holdings U.S. Inc., and Denon Electronics (USA) LLC- filed by Sonos Inc.. (Attachments: # 1 Exhibits A-D, # 2 Exhibits E-F, # 3 Exhibit G, # 4 Exhibits H-K, # 5 Exhibit L, # 6 Exhibits M-O, # 7 Exhibits P-R, # 8 Exhibit S, # 9 Exhibit T, # 10 Exhibit U, # 11 Exhibit V, # 12 Exhibit W, # 13 Exhibit X, # 14 Exhibit Y, # 15 Exhibit Z)(nms) (Entered: 03/09/2015)
03/16/2015	32	[SEALED] ANSWERING BRIEF in Opposition re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of Privileged Documents Relevant Thereto filed by Sonos Inc..Reply Brief due date per Local Rules is 3/26/2015. (Rovner, Philip) (Entered: 03/16/2015)
03/16/2015	33	[SEALED] DECLARATION of George I. Lee re 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/16/2015	34	[SEALED] DECLARATION of Rory P. Shea re 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/16/2015	35	[SEALED] DECLARATION of John Dan Smith III re 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/16/2015	36	[SEALED] DECLARATION of Sean M. Sullivan re 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/16/2015	37	[SEALED] DECLARATION of Mark Triplett re 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/16/2015	38	DECLARATION of Philip A. Rovner re 32 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibits A-C, # 2 Exhibits D-F, # 3 Exhibits G-I, # 4 Exhibits J-M)(Rovner, Philip) Modified on 3/17/2015 (nms). (Entered: 03/16/2015)
03/18/2015	39	REDACTED VERSION of 32 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
03/18/2015	40	REDACTED VERSION of 33 Declaration of George I. Lee, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
03/18/2015	41	REDACTED VERSION of 34 Declaration of Rory P. Shea, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
03/18/2015	42	REDACTED VERSION of 35 Declaration of John Dan Smith III, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
03/18/2015	43	REDACTED VERSION of 37 Declaration of Mark Triplett, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
03/18/2015	44	REDACTED VERSION of 36 Declaration of Sean M. Sullivan, by Sonos Inc.. (Rovner, Philip) Modified on 3/19/2015 (nms). (Entered: 03/18/2015)
04/02/2015	45	REPLY BRIEF re 19 MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff and for In Camera Review of

LINKPLAY EXHIBIT 1004
Page 319 of 4822

		Privileged Documents Relevant Thereto filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 04/02/2015)
04/14/2015	46	ORAL ORDER: The Court will hear oral argument on the MOTION to Disqualify Counsel Lee, Sullivan, Shea & Smith from Representing Plaintiff (D.I. 19) on 6/19/2015 at 1:00 PM in Courtroom 6A before Judge Richard G. Andrews. Ordered by Judge Richard G. Andrews on 4/14/2015. (nms) (Entered: 04/14/2015)
04/22/2015	47	MOTION for Pro Hac Vice Appearance of Attorney Kurt A. Schwarz of JACKSON WALKER, LLP - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 04/22/2015)
04/23/2015		SO ORDERED, re 47 MOTION for Pro Hac Vice Appearance of Attorney Kurt A. Schwarz of JACKSON WALKER, LLP filed by Denon Electronics (USA) LLC, D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 4/23/2015. (nms) (Entered: 04/23/2015)
04/30/2015	48	ANSWER to 31 Amended Complaint, with Jury Demand, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/5/2015 (nms). (Entered: 04/30/2015)
04/30/2015	49	Disclosure Statement pursuant to Rule 7.1: identifying Other Affiliate Morgan Stanley, Other Affiliate Goldman Sachs Group Inc. for D&M Holdings Inc. filed by D&M Holdings Inc.. (Flynn, Michael) (Entered: 04/30/2015)
06/19/2015		Minute Entry for proceedings held before Judge Richard G. Andrews - Oral Argument held on 6/19/2015. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 06/19/2015)
06/23/2015	50	Official Transcript of Motion to Disqualify held on 06-19-15 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 7/14/2015. Redacted Transcript Deadline set for 7/24/2015. Release of Transcript Restriction set for 9/21/2015. (lad) (Entered: 06/23/2015)
06/29/2015	51	Order Setting Rule 16(b) Conference: A Scheduling Conference is set for 8/18/2015, at 3:00 PM in Chambers before Judge Richard G. Andrews (see Order for further details). Signed by Judge Richard G. Andrews on 6/29/2015. (nms) (Entered: 06/29/2015)
07/17/2015	52	NOTICE OF SERVICE of Plaintiff Sonos Inc.'s First Set of Interrogatories to Defendants and Plaintiff Sonos, Inc.'s First Set of Requests for the Production of Documents and Things to Defendants filed by Sonos Inc.. (Rovner, Philip) (Entered: 07/17/2015)
07/29/2015	53	NOTICE OF SERVICE of (1) Defendants' First Set of Common Requests for Production of Documents to Plaintiff; and (2) Defendant D&M Holdings Inc.'s First Set of Interrogatories to Plaintiff filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 07/29/2015)
08/13/2015	54	Letter to The Honorable Richard G. Andrews from Jack B. Blumenfeld regarding scheduling conference. (Blumenfeld, Jack) (Entered: 08/13/2015)
08/13/2015	55	Letter to The Honorable Richard G. Andrews from Philip A. Rovner, Esq. responding to defendants' letter of earlier today re scheduling conference. (Rovner, Philip) Modified on 8/17/2015 (nms). (Entered: 08/13/2015)
08/14/2015	56	PROPOSED Scheduling Order, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Letter)(Blumenfeld, Jack) Modified on 8/17/2015 (nms). (Entered: 08/14/2015)

LINKPLAY EXHIBIT 1004
Page 320 of 4822

08/14/2015	57	PROPOSED Scheduling Order, by Sonos Inc.. (Attachments: # 1 Letter) (Rovner, Philip) Modified on 8/17/2015 (nms). (Entered: 08/14/2015)
08/17/2015	58	ORAL ORDER: Defendants' request (D.I. 54) is DENIED. Defendants' request (D.I. 56) is also DENIED. Scheduling conference will be based on D.I. 57 . Ordered by Judge Richard G. Andrews on 8/17/2015. (nms) (Entered: 08/17/2015)
08/17/2015	59	NOTICE OF SERVICE of (1) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Requests for Production of Documents and Things; and (2) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 08/17/2015)
08/18/2015	60	Joint PROPOSED revised scheduling order, by Sonos Inc.. (Attachments: # 1 Letter)(Rovner, Philip) Modified on 8/18/2015 (nms). (Entered: 08/18/2015)
08/18/2015		Minute Entry for proceedings held before Judge Richard G. Andrews - Scheduling Conference held on 8/18/2015. (Court Reporter Leonard Dibbs.) (nms) (Entered: 08/18/2015)
08/19/2015	61	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) US 8,024,055 B1; US 8,843,224 B2; US 8,923,997 B2; US 8,370,678 B2; US 8,689,036 B2; US 8,938,637 B2; . (Rovner, Philip) (Entered: 08/19/2015)
08/20/2015	62	Official Transcript of Scheduling Conference held on 08-18-15 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 9/10/2015. Redacted Transcript Deadline set for 9/21/2015. Release of Transcript Restriction set for 11/18/2015. (lad) (Entered: 08/20/2015)
08/24/2015	63	MOTION for Pro Hac Vice Appearance of Attorney Blake T. Dietrich of Jackson Walker, LLP - filed by D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 08/24/2015)
08/25/2015		SO ORDERED, re 63 MOTION for Pro Hac Vice Appearance of Attorney Blake T. Dietrich of Jackson Walker, LLP filed by Denon Electronics (USA) LLC, D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 8/25/2015. (nms) (Entered: 08/25/2015)
08/25/2015	64	PROPOSED Scheduling Order, by Sonos Inc.. (Attachments: # 1 Letter) (Rovner, Philip) Modified on 8/25/2015 (nms). (Entered: 08/25/2015)
08/25/2015		Pro Hac Vice Attorney Blake T. Dietrich for D&M Holdings U.S. Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (dmp,) (Entered: 08/25/2015)
08/25/2015	65	SCHEDULING ORDER: Case referred to the Magistrate Judge for the purpose of exploring ADR. Joinder of Parties due by 1/29/2016. Amended Pleadings due by 1/29/2016. Discovery due by 11/18/2016. Dispositive Motions due by 4/27/2017. Answering Brief due 5/18/2017. Reply Brief due 6/8/2017. Joint Claim Construction Brief due by 9/23/2016. A Markman Hearing is set for 10/13/2016, at 9:00 AM in Courtroom 6A before Judge Richard G. Andrews. A Pretrial Conference is set for 9/22/2017, at 9:00 AM in Courtroom 6A before Judge Richard G. Andrews. A 5 day Jury Trial is set for 10/2/2017, at 9:30 AM in Courtroom 6A before Judge Richard G. Andrews (see Order for further details). Signed by Judge Richard G. Andrews on 8/25/2015. (nms) (Entered: 08/25/2015)
08/28/2015	66	NOTICE OF SERVICE of Sonos Inc.'s Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff; Plaintiff

LINKPLAY EXHIBIT 1004
Page 321 of 4822

		Sonos, Inc.'s Objections and Responses to Defendants' First Set of Common Requests for Production of Documents re 53 Notice of Service, filed by Sonos Inc..(Rovner, Philip) (Entered: 08/28/2015)
09/01/2015		CASE REFERRED to Judge Thynge for Mediation. (cak) (Entered: 09/01/2015)
09/03/2015	67	ORDER Setting Teleconference: Plaintiff's counsel to initiate the call. A Telephone Conference is set for 9/16/2015 at 11:00 AM Eastern Time before Judge Mary Pat Thynge to discuss ADR. Signed by Judge Mary Pat Thynge on 9/3/15. (cak) (Entered: 09/03/2015)
09/04/2015	68	PROPOSED Protective Order, by Sonos Inc.. (Rovner, Philip) Modified on 9/8/2015 (nms). (Entered: 09/04/2015)
09/08/2015	69	SO ORDERED Granting 68 Proposed Stipulated Protective Order. Signed by Judge Richard G. Andrews on 9/8/2015. (nms) (Entered: 09/08/2015)
09/09/2015	70	MEMORANDUM OPINION regarding MOTION to Disqualify Counsel (D.I. 19). Signed by Judge Richard G. Andrews on 9/9/2015. (nms) (Entered: 09/09/2015)
09/09/2015	71	ORDER Denying 19 MOTION to Disqualify Counsel. Signed by Judge Richard G. Andrews on 9/9/2015. (nms) (Entered: 09/09/2015)
09/23/2015	72	ORDER Setting Mediation Conferences: A Telephone Conference is set for 4/11/2016 at 10:00 AM Eastern Time before Judge Mary Pat Thynge. A Mediation Conference is set for 5/12/2016 at 10:00 AM in Courtroom 2B before Judge Mary Pat Thynge. SEE ORDER FOR DETAILS. Signed by Judge Mary Pat Thynge on 9/23/15. (cak) (Entered: 09/23/2015)
10/08/2015	73	NOTICE of Change of Address (Jackson Walker, L.L.P. - Dallas) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Flynn, Michael) (Entered: 10/08/2015)
10/08/2015	74	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Initial Disclosures Pursuant to Section 2(B) of the Scheduling Order; Plaintiff Sonos, Inc.'s Initial Disclosures Pursuant to Rule 26(a)(1) of the Federal Rules of Civil Procedure and Section 3 of the District of Delaware's Default Standard For Discovery re 65 Scheduling Order,, filed by Sonos Inc..(Rovner, Philip) (Entered: 10/08/2015)
10/08/2015	75	NOTICE OF SERVICE of (1) Defendants' Initial Disclosures; and (2) Defendants' Disclosures Pursuant to Paragraph 3 of the Delaware Default Standard for Discovery filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/08/2015)
10/15/2015	76	MOTION for Pro Hac Vice Appearance of Attorney Michael P. Boyea, Esq. - filed by Sonos Inc.. (Rovner, Philip) (Entered: 10/15/2015)
10/15/2015	77	NOTICE of change of address for Lee Sullivan Shea & Smith LLP, by Sonos Inc.. (Rovner, Philip) Modified on 10/16/2015 (nms). (Entered: 10/15/2015)
10/16/2015		SO ORDERED, re 76 MOTION for Pro Hac Vice Appearance of Attorney Michael P. Boyea, Esq., filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 10/16/2015. (nms) (Entered: 10/16/2015)
10/16/2015		Pro Hac Vice Attorney Michael P. Boyea for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (dmp,) (Entered: 10/16/2015)
10/16/2015	78	NOTICE OF SERVICE of Defendants' First Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/16/2015)
11/03/2015	79	

LINKPLAY EXHIBIT 1004
Page 322 of 4822

		NOTICE to Take Deposition of 30 (b)(6) notice of deposition of D&M Holdings Inc. d/b/a The D+M Group, D&M Holdings U.S. Inc., and Denon Electronics (USA), LLC on November 17, 2015 filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/03/2015)
11/05/2015	80	NOTICE OF SERVICE of Defendants' First Amended Disclosures Pursuant to Paragraph 3 of the Delaware Default Standard for Discovery filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/05/2015)
11/30/2015	81	[SEALED] Motion for Leave to Amend Answer to Assert Counterclaims - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibits A-I to Amended Answer, # 4 Exhibit J to Amended Answer, Part 1, # 5 Exhibit J to Amended Answer, Part 2, # 6 Exhibit 3)(Flynn, Michael) Modified on 12/1/2015 (nms). (Attachment 6 replaced on 12/1/2015) (nms). (Entered: 11/30/2015)
11/30/2015		Set Answering Brief Deadline re 81 MOTION for Leave to Amend Their Answer to Assert Counterclaims. Answering Brief/Response due date per Local Rules is 12/17/2015. (nms) (Entered: 12/01/2015)
12/01/2015		CORRECTING ENTRY: Exhibit 3 to D.I. 81 has been replaced per counsel's request. The reference to "Exhibit B" in the Order has been changed to read "Exhibit 2." (nms) (Entered: 12/01/2015)
12/04/2015	82	STIPULATION TO EXTEND TIME time for plaintiff to file its opposition to defendants' motion for leave to amend their answer to assert oounterclaims to January 4, 2016 - filed by Sonos Inc.. (Rovner, Philip) Modified on 12/4/2015 (nms). (Entered: 12/04/2015)
12/04/2015		SO ORDERED, re 82 STIPULATION TO EXTEND TIME to file opposition to motion for leave to amend answer to assert counterclaims to January 4, 2016, filed by Sonos Inc. (Reset Briefing Schedule: re 81 MOTION for Leave to Amend Their Answer to Assert Counterclaims. Answering Brief due 1/4/2016). Signed by Judge Richard G. Andrews on 12/4/2015. (nms) (Entered: 12/04/2015)
12/08/2015	83	REDACTED VERSION of 81 MOTION for Leave to Amend Answer to Assert Counterclaims, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibits A-I to Amended Answer, # 4 Exhibit J to Amended Answer, Part 1, # 5 Exhibit J to Amended Answer, Part 2, # 6 Exhibit 3)(Flynn, Michael) Modified on 12/8/2015 (nms). (Entered: 12/08/2015)
12/10/2015	84	NOTICE OF SERVICE of subpoenas on AL Infinity d/b/a Altec Lansing filed by Sonos Inc.. (Attachments: # 1 Exhibit A, # 2 Exhibit B)(Rovner, Philip) (Entered: 12/10/2015)
12/11/2015	85	NOTICE OF SERVICE of Defendants' Core Technical Document Production filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 12/11/2015)
12/28/2015	86	NOTICE OF SERVICE of Defendants' Second Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 12/28/2015)
12/29/2015	87	NOTICE OF SERVICE of subpoenas on Tymphany Corporation filed by Sonos Inc.. (Attachments: # 1 Exhibit A-B)(Rovner, Philip) (Entered: 12/29/2015)
01/04/2016	88	ANSWERING BRIEF in Opposition re 81 MOTION for Leave to Amend Their Answer to Assert Counterclaims filed by Sonos Inc..Reply Brief due date per Local Rules is 1/14/2016. (Attachments: # 1 Exhibit A-E)(Rovner, Philip) (Entered: 01/04/2016)
01/14/2016	89	REPLY BRIEF re 81 MOTION for Leave to Amend Their Answer to Assert Counterclaims filed by D&M Holdings Inc., D&M Holdings U.S.

LINKPLAY EXHIBIT 1004
Page 323 of 4822

		Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-D)(Flynn, Michael) (Entered: 01/14/2016)
01/15/2016	90	REQUEST for Oral Argument by Sonos Inc. re 81 MOTION for Leave to Amend Their Answer to Assert Counterclaims. (Rovner, Philip) (Entered: 01/15/2016)
01/20/2016	91	MOTION for Leave to File a Sur-Reply in Opposition to Motion for Leave to Amend Their Answer to Assert Counterclaims - filed by Sonos Inc.. (Attachments: # 1 Sur-Reply)(Rovner, Philip) Modified on 1/21/2016 (nms). (Entered: 01/20/2016)
01/20/2016		Set Answering Brief Deadline re 91 MOTION for Leave to File a Sur-Reply in Opposition to Motion for Leave to Amend Their Answer to Assert Counterclaims. Answering Brief/Response due date per Local Rules is 2/8/2016. (nms) (Entered: 01/21/2016)
01/29/2016	92	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Initial Claim Charts filed by Sonos Inc..(Rovner, Philip) (Entered: 01/29/2016)
01/29/2016	93	[SEALED] MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, Volume I - filed by Sonos Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 1 (A-F), # 3 Exhibit 1 (G-L), # 4 Exhibit 1 (M-N), # 5 Exhibit 1 (O-U))(Rovner, Philip) Modified on 2/1/2016 (nms). (Entered: 01/29/2016)
01/29/2016	94	[SEALED] MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, VOL. II - filed by Sonos Inc.. (Attachments: # 1 Exhibit 1 (V-Z), # 2 Exhibit 1 (AA-CC), # 3 Exhibit 2, # 4 Exhibit 3)(Rovner, Philip) Modified on 2/1/2016 (nms). (Entered: 01/29/2016)
01/29/2016		Set Answering Brief Deadline re 93 MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, Volume I. Answering Brief/Response due date per Local Rules is 2/16/2016. (nms) (Entered: 02/01/2016)
02/08/2016	95	ANSWERING BRIEF in Opposition re 91 MOTION for Leave to File a Sur-Reply in Opposition to Motion for Leave to Amend Their Answer to Assert Counterclaims, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 2/19/2016. (Attachments: # 1 Exhibits A-C)(Flynn, Michael) (Attachment 1 replaced on 2/9/2016) (nms). Modified on 2/9/2016 (nms). (Entered: 02/08/2016)
02/09/2016		CORRECTING ENTRY: The pdf for the exhibits attached to D.I. 95 has been replaced per counsel's request. Exhibit D has been removed. (nms) (Entered: 02/09/2016)
02/09/2016		REDACTION NOTICE: In accordance with section G of the Administrative Procedures Governing Filing and Service by Electronic Means, redacted versions of sealed documents shall be filed electronically within 7 days of the filing of the sealed document. The records of this case do not reflect the filing of redacted versions of DI # 93 and 94 . (nms) (Entered: 02/09/2016)
02/10/2016	96	REDACTED VERSION of 93 MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, Volume I, by Sonos Inc.. (Attachments: # 1 Exhibit 1)(Rovner, Philip) Modified on 2/10/2016 (nms). (Entered: 02/10/2016)
02/10/2016	97	REDACTED VERSION of 94 MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, VOL. II, by Sonos Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3)(Rovner, Philip) Modified on 2/10/2016 (nms). (Entered: 02/10/2016)
02/16/2016	98	RESPONSE to 93 MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, filed by D&M

LINKPLAY EXHIBIT 1004
Page 324 of 4822

		Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 2/17/2016 (nms). (Entered: 02/16/2016)
02/26/2016	99	REPLY BRIEF re 93 MOTION for Leave to Amend Complaint Against Defendants to Replace Seven Asserted Patents, Volume I filed by Sonos Inc.. (Rovner, Philip) (Entered: 02/26/2016)
03/07/2016	100	ORDER Granting Motion for Leave to Amend (D.I. 81). The Motion for Leave to File a Sur-Reply (D.I. 91) is Dismissed as moot. The Motion for Leave to Amend Complaint (D.I. 93) is Granted. Defendants counterclaims for patent infringement are, pursuant to Fed. R. Civ. P. 42 (b), and consistent with the Courts practice, SEVERED for a separate trial. The counterclaims are to be docketed with a new civil action number. The parties should meet and confer and submit by March 14, 2016, a Rule 16 scheduling order for the counterclaims. If the parties do not agree on a schedule, they should promptly call Chambers to get a date and time for a scheduling conference. Signed by Judge Richard G. Andrews on 3/4/2016. (nms) Modified on 3/7/2016 (nms). (Entered: 03/07/2016)
03/07/2016	101	[SEALED] AMENDED ANSWER, Defenses, and Counterclaims for Patent Infringement to 31 Amended Complaint, by D&M Holdings U.S. Inc., D&M Holdings Inc., Denon Electronics (USA) LLC. (nms) (Additional attachment(s) added on 3/7/2016: # 1 Exhibits A-I, # 2 Exhibit J - part 1, # 3 Exhibit J - part 2) (nms). (Entered: 03/07/2016)
03/07/2016	102	THIRD AMENDED COMPLAINT For Patent Infringement against D&M Holdings Inc., D&M Holdings U.S. Inc., and Denon Electronics (USA) LLC- filed by Sonos Inc.. (Attachments: # 1 Exhibits A-F, # 2 Exhibits G-L, # 3 Exhibits M-N, # 4 Exhibits O-U)(nms) (Entered: 03/07/2016)
03/07/2016		Remark: Per the Order (D.I. 100), the Counterclaims filed at D.I. 101 have been severed and have been filed in the new case found at Civil Action 16-141-RGA. (nms) (Entered: 03/07/2016)
03/08/2016	103	Report to the Commissioner of Patents and Trademarks for Patent/Trademark Number(s) D559, 197 S; 7,571,014 B1; 8,588,949 B2; 8,843,224 B2; 8,938,637 B2; 8,938,312 B2; 9,042,556 B2 9,130,771 B2, 9,195,258 B2, 9,213,357 B2, 9,202,509 B2, 9,219,959 B2. (Rovner, Philip) (Entered: 03/08/2016)
03/15/2016	104	STIPULATION TO EXTEND TIME to answer, move or otherwise respond to the Third Amended Complaint (D.I. 102) to March 28, 2016 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 03/15/2016)
03/16/2016		SO ORDERED, re 104 STIPULATION TO EXTEND TIME to answer, move or otherwise respond to the Third Amended Complaint to March 28, 2016, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc. (Reset Answer Deadlines: D&M Holdings Inc. answer due 3/28/2016; D&M Holdings U.S. Inc. answer due 3/28/2016; Denon Electronics (USA) LLC answer due 3/28/2016). Signed by Judge Richard G. Andrews on 3/16/2016. (nms) (Entered: 03/16/2016)
03/18/2016	105	NOTICE of Third Party Subpoenas by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Attachments: # 1 Part 2)(Flynn, Michael) (Entered: 03/18/2016)
03/28/2016	106	ANSWER to 102 Amended Complaint, with Jury Demand, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 3/29/2016 (nms). (Entered: 03/28/2016)
04/11/2016	107	ORAL ORDER: The mediation scheduled for 5/12/16 at 10:00 AM with Judge Thynge and the submission due date of 4/28/16 are cancelled. Ordered by Judge Mary Pat Thynge on 4/11/16. (cak) (Entered: 04/11/2016)
04/12/2016	108	ORAL ORDER: A teleconference with Judge Thynge has been scheduled for 8/11/16 at 9:30 AM Eastern Time to be initiated by defense counsel. The

LINKPLAY EXHIBIT 1004
Page 325 of 4822

		mediation with Judge Thynge has been rescheduled for 8/31/16 at 10:00 AM. Submissions of the parties shall now be due on or before 8/19/16 by no later than 12:00 Noon. All other provisions of the Court's 9/23/15 Order remain in full force and effect. Ordered by Judge Mary Pat Thynge on 4/12/16. (cak) (Entered: 04/12/2016)
04/15/2016	109	NOTICE OF SERVICE of Defendants' Initial Invalidity Contentions filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 04/15/2016)
04/18/2016	110	ORDER Setting Mediation Conferences: A Telephone Conference is set for 8/11/2016 at 9:30 AM before Judge Mary Pat Thynge to be initiated by defense counsel. The Mediation Conference is set for 8/31/2016 at 10:00 AM in Courtroom 2B before Judge Mary Pat Thynge. SEE ORDER FOR DETAILS. Signed by Judge Mary Pat Thynge on 4/18/16. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(cak) (Entered: 04/18/2016)
04/21/2016	111	MOTION to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f) - filed by Sonos Inc.. (Rovner, Philip) Modified on 4/22/2016 (nms). (Entered: 04/21/2016)
04/21/2016	112	OPENING BRIEF in Support re 111 MOTION to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f), filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 5/9/2016. (Rovner, Philip) Modified on 4/22/2016 (nms). (Entered: 04/21/2016)
04/29/2016	113	NOTICE OF SERVICE of Sonos, Inc.'s Supplemental Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff and Plaintiff Sonos, Inc.'s First Supplemental Initial Disclosures Pursuant to Rule 26(a)(1) of the Federal Rules of Civil Procedure and Section 3 of The District of Delaware's Default Standard filed by Sonos Inc..(Rovner, Philip) (Entered: 04/29/2016)
04/29/2016	114	NOTICE OF SERVICE of (1) Defendants' Third Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories; and (2) Defendants' First Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Requests for the Production of Documents and Things filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 04/29/2016)
05/03/2016	115	NOTICE OF SERVICE of Plaintiff Sonos Inc.'s Second Set of Interrogatories to Defendants filed by Sonos Inc..(Rovner, Philip) (Entered: 05/03/2016)
05/06/2016	116	MOTION for Judgment on the Pleadings - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/10/2016 (nms). (Entered: 05/06/2016)
05/06/2016	117	OPENING BRIEF in Support re 116 MOTION for Judgment on the Pleadings filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Answering Brief/Response due date per Local Rules is 5/23/2016. (Flynn, Michael) (Entered: 05/06/2016)
05/06/2016	118	DECLARATION of John M. Jackson re 116 MOTION for Judgment on the Pleadings, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A)(Flynn, Michael) Modified on 5/10/2016 (nms). (Entered: 05/06/2016)
05/09/2016	119	ANSWERING BRIEF in Opposition re 111 MOTION to Strike, Inc.s Motion to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f) filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 5/19/2016. (Flynn, Michael) (Entered: 05/09/2016)
05/11/2016	120	STIPULATION to extend time to file opposition to Motion for Judgment on the Pleadings to May 27, 2016 and time for Defendants to file a reply brief extended to June 10, 2016, by Sonos Inc.. (Rovner, Philip) Modified on 5/11/2016 (nms). (Entered: 05/11/2016)

LINKPLAY EXHIBIT 1004
Page 326 of 4822

05/11/2016	121	Letter to The Honorable Richard G. Andrews from Michael Flynn regarding Request for Oral Argument. (Flynn, Michael) Modified on 5/11/2016 (nms). (Entered: 05/11/2016)
05/11/2016		SO ORDERED, re 120 Stipulation to Extend Time, filed by Sonos Inc. (Reset Briefing Schedule: re 116 MOTION for Judgment on the Pleadings. (Answering Brief due 5/27/2016, Reply Brief due 6/10/2016). Signed by Judge Richard G. Andrews on 5/11/2016. (nms) (Entered: 05/11/2016)
05/12/2016	122	Letter to The Honorable Richard G. Andrews from Philip A. Rovner regarding D&M's Request for Oral Argument. (Rovner, Philip) Modified on 5/12/2016 (nms). (Entered: 05/12/2016)
05/17/2016	123	NOTICE OF SERVICE of Defendants' Second Set of Interrogatories to Plaintiff filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 05/17/2016)
05/19/2016	124	REPLY BRIEF re 111 MOTION to Strike, Inc.s Motion to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f) filed by Sonos Inc.. (Attachments: # 1 Exhibit A-B)(Rovner, Philip) (Entered: 05/19/2016)
05/27/2016	125	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Second Set of Requests for the Production of Documents and Things to Defendants filed by Sonos Inc..(Rovner, Philip) (Entered: 05/27/2016)
05/27/2016	126	ANSWERING BRIEF in Opposition re 116 MOTION for Judgment on the Pleadings filed by Sonos Inc..Reply Brief due date per Local Rules is 6/6/2016. (Attachments: # 1 Exhibit A-G, # 2 Exhibit H-K)(Rovner, Philip) (Main Document 126 replaced on 5/31/2016) (nms). (Entered: 05/27/2016)
05/31/2016		CORRECTING ENTRY: The main document pdf for D.I. 126 has been replaced with an amended version per counsel's request. Formatting issues were corrected. (nms) (Entered: 05/31/2016)
06/02/2016	127	NOTICE OF SERVICE of Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Second Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 06/02/2016)
06/06/2016	128	NOTICE OF SERVICE of Defendants' List of Proposed Constructions for Terms Proposed by Plaintiff filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 06/06/2016)
06/09/2016	129	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Preliminary Proposed Claim Constructions filed by Sonos Inc..(Rovner, Philip) (Entered: 06/09/2016)
06/10/2016	130	REPLY BRIEF re 116 MOTION for Judgment on the Pleadings filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/10/2016)
06/17/2016	131	ORAL ORDER: The parties have advised that a dispute has arisen requiring judicial attention. The Court will hold a discovery conference on 6/27/2016, at 10:00 AM in Chambers before Judge Richard G. Andrews to take up this issue. In preparation for this hearing the parties shall follow the Discovery Matters and Disputes procedure as set forth in the Scheduling Order. Ordered by Judge Richard G. Andrews on 6/17/2016. (nms) (Entered: 06/17/2016)
06/17/2016	132	Joint STIPULATION to amend Scheduling Order, by Sonos Inc.. (Rovner, Philip) Modified on 6/20/2016 (nms). (Entered: 06/17/2016)
06/20/2016	133	SO ORDERED Granting 132 Joint Stipulation to Amend Scheduling Order. Joint Claim Construction Brief due by 11/23/2016, and the Markman Hearing is now set for 12/14/2016, at 8:30 AM in Courtroom 6A before Judge Richard G. Andrews (see Stipulation for further details). Signed by Judge Richard G. Andrews on 6/20/2016. (nms) (Entered: 06/20/2016)
06/20/2016	134	

LINKPLAY EXHIBIT 1004
Page 327 of 4822

		NOTICE OF SERVICE of Sonos, Inc.'s Responses to Defendants' Second Set of Interrogatories (Nos. 12-13) to Plaintiff filed by Sonos Inc..(Rovner, Philip) (Entered: 06/20/2016)
06/23/2016	135	Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding June 27, 2016 discovery dispute conference. (Flynn, Michael) (Entered: 06/23/2016)
06/24/2016	136	Letter to The Honorable Richard G. Andrews from Philip A. Rovner regarding June 27, 2016 discovery dispute conference - re 135 Letter. (Rovner, Philip) (Entered: 06/24/2016)
06/27/2016	137	Official Transcript of Discovery Dispute held on 06-27-16 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 7/18/2016. Redacted Transcript Deadline set for 7/28/2016. Release of Transcript Restriction set for 9/26/2016. (lad) (Entered: 06/27/2016)
06/27/2016	138	NOTICE OF SERVICE of Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Second Set of Requests for Production of Documents and Things filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 06/27/2016)
06/27/2016		Minute Entry for proceedings held before Judge Richard G. Andrews - Discovery Conference held on 6/27/2016. Appearances: Shea, Smith, Choa for Plaintiff; Blumenfeld, Flynn, Jackson for Defendants. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 06/28/2016)
06/29/2016	139	ORAL ORDER: The MOTION to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f) (D.I. 111) is referred to Chief Magistrate Judge Mary Pat Thynge. Ordered by Judge Richard G. Andrews on 6/29/2016. Motions referred to Mary Pat Thynge.(nms) (Entered: 06/29/2016)
07/15/2016	140	NOTICE OF SERVICE of Defendants' Updated List of Proposed Claim Terms and Phrases for Construction filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 07/15/2016)
08/01/2016	141	MOTION for Leave to Amend Answer to Add the Defense of Inequitable Conduct - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 8/6/2016 (nms). (Entered: 08/01/2016)
08/01/2016	142	OPENING BRIEF in Support re 141 MOTION for Leave to Amend Answer to Add the Defense of Inequitable Conduct<, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Answering Brief/Response due date per Local Rules is 8/18/2016. (Attachments: # 1 Exhibit A, # 2 Exhibit B)(Flynn, Michael) Modified on 8/6/2016 (nms). (Entered: 08/01/2016)
08/10/2016	143	REPORT AND RECOMMENDATIONS re 111 MOTION to Strike Affirmative Defenses under Federal Rule of Civil Procedure 12(f) filed by Sonos Inc. Please note that when filing Objections pursuant to Federal Rule of Civil Procedure 72(b)(2), briefing consists solely of the Objections (no longer than ten (10) pages) and the Response to the Objections (no longer than ten (10) pages). No further briefing shall be permitted with respect to objections without leave of the Court. Objections to R&R due by 8/29/2016. Signed by Judge Mary Pat Thynge on 8/10/16. (cak) (Entered: 08/10/2016)
08/11/2016	144	Joint STIPULATION to Amend Scheduling Order, by Sonos Inc.. (Rovner, Philip) Modified on 8/15/2016 (nms). (Entered: 08/11/2016)
08/12/2016		

LINKPLAY EXHIBIT 1004
Page 328 of 4822

		SO ORDERED, re 144 Stipulation filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 8/12/2016. (ksr,) (Entered: 08/12/2016)
08/12/2016	145	NOTICE OF SERVICE of Defendants' Fourth Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 08/12/2016)
08/16/2016	146	STIPULATION TO EXTEND TIME to file its opposition to Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct to August 26, 2016 - filed by Sonos Inc.. (Rovner, Philip) Modified on 8/17/2016 (nms). (Entered: 08/16/2016)
08/17/2016		SO ORDERED, re 146 STIPULATION TO EXTEND TIME to file opposition to Motion for Leave to Amend their Answer to Add the Defense of Inequitable Conduct to August 26, 2016, filed by Sonos Inc. (Reset Briefing Schedule: re 141 MOTION for Leave to Amend Answer to Add the Defense of Inequitable Conduct. Answering Brief due 8/26/2016). Signed by Judge Richard G. Andrews on 8/17/2016. (nms) (Entered: 08/17/2016)
08/17/2016	147	Joint Claim Construction Chart, Volume 1, by Sonos Inc.. (Attachments: # 1 Exhibit 1, # 2 Exhibit A, # 3 Exhibit B-D, # 4 Exhibit E, # 5 Exhibit F, # 6 Exhibits G-H)(Rovner, Philip) Modified on 8/18/2016 (nms). (Additional attachment(s) added on 8/18/2016: # 7 Exhibit I part 1, # 8 Exhibit I part 2, # 9 Exhibits J-K, # 10 Exhibits L-N, # 11 Exhibit O) (nms). (Main Document 147 replaced on 8/18/2016) (nms). (Entered: 08/17/2016)
08/17/2016	148	Joint Claim Construction Chart, Volume 2, by Sonos Inc.. (Attachments: # 1 Exhibits P-R)(Rovner, Philip) (Additional attachment(s) added on 8/18/2016: # 2 Exhibits S-U) (nms). Modified on 8/18/2016 (nms). (Additional attachment(s) added on 8/18/2016: # 3 Exhibits V-X) (nms). Modified on 8/18/2016 (nms). (Main Document 148 replaced on 8/18/2016) (nms). (Entered: 08/17/2016)
08/17/2016	149	Joint Claim Construction Chart, Volume 3, by Sonos Inc.. (Attachments: # 1 Exhibit Y-AA)(Rovner, Philip) (Additional attachment(s) added on 8/18/2016: # 2 Exhibit BB part 1, # 3 Exhibit BB part 2, # 4 Exhibit CC) (nms). Modified on 8/18/2016 (nms). Modified on 8/18/2016 (nms). (Main Document 149 replaced on 8/18/2016) (nms). (Entered: 08/17/2016)
08/18/2016		CORRECTING ENTRY: The Joint Claim Construction Chart initially filed in seven volumes (D.I. 147 through D.I. 153) has been reconfigured, and is now three volumes in total (D.I. 147 through 149). (nms) (Entered: 08/18/2016)
08/25/2016	150	STIPULATION of Dismissal Regarding U.S. Patent No. 9,130,771, by Sonos Inc.. (Rovner, Philip) Modified on 8/25/2016 (nms). (Entered: 08/25/2016)
08/25/2016	151	SO ORDERED Granting 150 Stipulation and Order of Dismissal With Prejudice of All Claims and Defenses Regarding U.S. Patent No. 9,130,771 Only. Signed by Judge Richard G. Andrews on 8/25/2016. (nms) (Entered: 08/25/2016)
08/26/2016	152	ANSWERING BRIEF in Opposition re 141 MOTION for Leave to Amend Answer to Add the Defense of Inequitable Conduct filed by Sonos Inc..Reply Brief due date per Local Rules is 9/6/2016. (Attachments: # 1 Exhibit A-F)(Rovner, Philip) (Entered: 08/26/2016)
08/29/2016	153	STIPULATION TO EXTEND TIME for defendants to file a reply brief in support of motion for leave to amend answer to September 9, 2016 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 08/29/2016)
08/30/2016		SO ORDERED, re 153 STIPULATION TO EXTEND TIME to file a reply brief in support of motion for leave to amend answer to September 9, 2016, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc. (Reset Briefing Schedule: re 141 MOTION for Leave to

LINKPLAY EXHIBIT 1004
Page 329 of 4822

		Amend Answer to Add the Defense of Inequitable Conduct. Reply Brief due 9/9/2016). Signed by Judge Richard G. Andrews on 8/30/2016. (nms) (Entered: 08/30/2016)
08/30/2016	154	NOTICE to Take Deposition of Amended First Notice of Rule 30(b)(6) Deposition to Defendants on September 21, 2016 filed by Sonos Inc.. (Rovner, Philip) (Entered: 08/30/2016)
08/30/2016	155	NOTICE to Take Deposition of Second Notice of Rule 30(b)(6) Deposition to Defendants on September 23, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 08/30/2016)
08/30/2016	156	NOTICE to Take Deposition of Third Notice of Rule 30(b)(6) Deposition to Defendants on September 22, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 08/30/2016)
09/01/2016	157	ORDER ADOPTING 143 Report and Recommendation. The Motion to Strike (D.I. 111) is GRANTED in part and DENIED in part as set forth in the Report and Recommendation. Signed by Judge Richard G. Andrews on 8/31/2016. (nms) (Entered: 09/01/2016)
09/07/2016	158	Amended ANSWER to 102 Third Amended Complaint for Patent Infringement, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) Modified on 9/8/2016 (nms). (Entered: 09/07/2016)
09/09/2016	159	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Opening Claim Construction Brief (with Exhibits 1-8) and Declaration of Steven C. Visser (with Exhibit A-B) filed by Sonos Inc..(Rovner, Philip) (Entered: 09/09/2016)
09/09/2016	160	REPLY BRIEF re 141 MOTION for Leave to Amend Answer to Add the Defense of Inequitable Conduct filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-B)(Flynn, Michael) (Entered: 09/09/2016)
09/15/2016	161	MOTION to Strike New Amended Answer Submitted With Their Reply Brief - filed by Sonos Inc.. (Rovner, Philip) Modified on 9/16/2016 (nms). (Entered: 09/15/2016)
09/15/2016		Set Answering Brief Deadline re 161 MOTION to Strike New Amended Answer Submitted With Their Reply Brief. Answering Brief/Response due date per Local Rules is 10/3/2016. (nms) (Entered: 09/16/2016)
10/03/2016	162	ORAL ORDER: The Court will hear oral argument on the MOTION for Judgment on the Pleadings (D.I. 116) on 11/14/2016, at 3:00 PM in Courtroom 6A before Judge Richard G. Andrews. Ordered by Judge Richard G. Andrews on 10/3/2016. (nms) (Entered: 10/03/2016)
10/03/2016	163	ANSWERING BRIEF in Opposition re 161 MOTION to Strike New Amended Answer Submitted With Their Reply Brief filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 10/14/2016. (Flynn, Michael) (Entered: 10/03/2016)
10/03/2016	164	DECLARATION of John M. Jackson re 163 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-B)(Flynn, Michael) Modified on 10/4/2016 (nms). (Entered: 10/03/2016)
10/05/2016	165	NOTICE to Take Deposition of Brendon Stead on October 13, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)
10/05/2016	166	NOTICE to Take Deposition of Evan Stuart on October 25, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)
10/05/2016	167	NOTICE to Take Deposition of Peter Celinksi on October 26, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)
10/05/2016	168	NOTICE to Take Deposition of Christopher Commons on October 27, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)

LINKPLAY EXHIBIT 1004
Page 330 of 4822

10/05/2016	169	NOTICE to Take Deposition of Satoshi Fukuzuku on October 28, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)
10/05/2016	170	NOTICE to Take Deposition of Martin R. Wachter on October 28, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 10/05/2016)
10/06/2016	171	NOTICE OF SERVICE of (1) Defendants' Second Set of Requests for Production of Documents to Plaintiff; and (2) Defendants' Third Set of Interrogatories to Plaintiff filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/06/2016)
10/07/2016	172	ORDER regarding Motion to Amend (D.I. 141]). Defendants are Ordered to advise the Court by October 12, 2016, upon which pleading they want to rely. If it is the second one, Defendants will need to file another motion to amend. Signed by Judge Richard G. Andrews on 10/7/2016. (nms) (Entered: 10/07/2016)
10/07/2016	173	NOTICE OF SERVICE of (1) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Amended First Notice of Rule 30(b)(6) Deposition; (2) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Second Notice of Rule 30(b)(6) Deposition; (3) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Third Notice of Rule 30(b)(6) Deposition; and (4) Defendants' Notice of 30(b)(6) Deposition filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/07/2016)
10/10/2016	174	NOTICE OF SERVICE of Sonos, Inc.'s Amended Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff filed by Sonos Inc..(Rovner, Philip) (Entered: 10/10/2016)
10/12/2016	175	Letter to The Honorable Richard G. Andrews from Michael Flynn regarding the Courts October 7, 2016 Order (D.I. 172). (Flynn, Michael) Modified on 10/13/2016 (nms). (Entered: 10/12/2016)
10/12/2016	176	MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 10/13/2016 (nms). (Entered: 10/12/2016)
10/12/2016	177	OPENING BRIEF in Support re 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Answering Brief/Response due date per Local Rules is 10/31/2016. (Attachments: # 1 Exhibit A, # 2 Exhibit B)(Flynn, Michael) Modified on 10/13/2016 (nms). (Entered: 10/12/2016)
10/12/2016	178	DECLARATION of John M. Jackson re 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit 1)(Flynn, Michael) Modified on 10/13/2016 (nms). (Entered: 10/12/2016)
10/14/2016	179	NOTICE of Non-Party Subpoena (International Business Machines Corporation) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Flynn, Michael) (Entered: 10/14/2016)
10/14/2016	180	ORAL ORDER: The motion for leave to amend (D.I. 141) and the motion to strike (D.I. 161) are both DISMISSED AS MOOT in light of the filing of the motion for leave to amend. (D.I. 176). Ordered by Judge Richard G. Andrews on 10/14/2016. (nms) (Entered: 10/14/2016)
10/14/2016	181	NOTICE OF SERVICE of (1) Defendants' Responsive Claim Construction Brief; and (2) Declaration of John M. Jackson in Support of Defendants' Responsive Claim Construction Brief filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/14/2016)
10/18/2016	182	

LINKPLAY EXHIBIT 1004
Page 331 of 4822

		NOTICE of Non-Party Subpoenas by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Attachments: # 1 Exhibits 1-5)(Flynn, Michael) (Entered: 10/18/2016)
10/19/2016	183	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s First Set of Requests for Admission to Defendants and Plaintiff Sonos Inc.'s Requests for Admission to Defendants Directed to Authenticity of Documents filed by Sonos Inc.. (Rovner, Philip) (Entered: 10/19/2016)
10/20/2016	184	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Amended Initial Disclosures Pursuant to Rule 26(a)(1) of the Federal Rules of Civil Procedure and Section 3 of the District of Delaware's Default Standard filed by Sonos Inc..(Rovner, Philip) (Entered: 10/20/2016)
10/24/2016	185	NOTICE to Take Deposition of Mike Groeninger on November 2, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/24/2016)
10/24/2016	186	NOTICE to Take Deposition of Nick Millington on November 4, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/24/2016)
10/24/2016	187	NOTICE to Take Deposition of Tom Cullen on November 11, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/24/2016)
10/24/2016	188	NOTICE to Take Deposition of Sonos, Inc. Pursuant to Fed. R. Civ. P. 30(b)(6) on November 2, 2016, November 4, 2016 and November 11, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 10/24/2016)
10/31/2016	189	ANSWERING BRIEF in Opposition re 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct filed by Sonos Inc..Reply Brief due date per Local Rules is 11/10/2016. (Attachments: # 1 Exhibit A-D)(Rovner, Philip) (Entered: 10/31/2016)
10/31/2016	190	NOTICE OF SERVICE of Plaintiff's Objections and Responses to Defendants' Notice of 30(b)(6) deposition filed by Sonos Inc..(Rovner, Philip) (Entered: 10/31/2016)
11/08/2016	191	NOTICE OF SERVICE of Plaintiff Sonos, Inc.'s Responses to Defendants' Third Set of Interrogatories (Nos. 14-16) to Plaintiff and Plaintiff Sonos, Inc.'s Objections and Responses to Defendants' Second Set of Requests for Production of Documents filed by Sonos Inc..(Rovner, Philip) (Entered: 11/08/2016)
11/10/2016	192	REPLY BRIEF re 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/10/2016)
11/10/2016	193	STIPULATION and Order Regarding Discovery by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC, D&M Holdings Inc.. (Flynn, Michael) (Entered: 11/10/2016)
11/11/2016	194	REQUEST for Oral Argument by Sonos Inc. re 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct. (Rovner, Philip) (Entered: 11/11/2016)
11/14/2016	195	SO ORDERED Granting (193 in 14-cv-1330-RGA, 37 in 16-cv-141-RGA) Stipulation and Order Regarding Discovery. Signed by Judge Richard G. Andrews on 11/14/2016. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 11/14/2016)
11/16/2016	196	NOTICE to Take Deposition of Jonathan Lang on December 8, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/16/2016)
11/16/2016	197	

LINKPLAY EXHIBIT 1004
Page 332 of 4822

		NOTICE to Take Deposition of Robert Lambourne on December 6, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/16/2016)
11/18/2016	198	Amended NOTICE to Take Deposition of Martin R. Wachter on November 29, 2016, filed by Sonos Inc..(Rovner, Philip) Modified on 11/21/2016 (nms). (Entered: 11/18/2016)
11/18/2016	199	NOTICE OF SERVICE of Sonos, Inc.'s Second Amended Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff; Sonos, Inc.'s Amended Responses to Defendants' Second Set of Interrogatories (Nos. 12-13) to Plaintiff; and Sonos, Inc.'s Amended Responses to Defendants' Third Set of Interrogatories (Nos. 14-16) to Plaintiff filed by Sonos Inc..(Rovner, Philip) (Entered: 11/18/2016)
11/18/2016	200	NOTICE OF SERVICE of (1) Defendants' Sixth Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Interrogatories; (2) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Requests For Admission; (3) Defendants' Objections and Responses to Plaintiff Sonos, Inc.'s Requests for Admission to Defendants Directed to Authenticity of Documents; and (4) Defendants' Amended Objections and Responses to Plaintiff Sonos, Inc.'s Second Set of Interrogatories filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/18/2016)
11/23/2016	201	[SEALED] Joint Claim Construction Brief, filed by Sonos Inc.. (Attachments: # 1 Exhibits 1-5, # 2 Exhibits 6-10, # 3 Exhibit 11 part 1, # 4 Exhibit 11 part 2, # 5 Exhibit 12, # 6 Exhibit 13 part 1, # 7 Exhibit 13 part 2, # 8 Exhibits 14-15, # 9 Exhibits 16-20, # 10 Exhibit 21)(Rovner, Philip) Modified on 11/28/2016 (nms). (Entered: 11/23/2016)
11/23/2016	202	DECLARATION of Robert John Anders re 201 Joint Claim Construction Brief, by Sonos Inc.. (Rovner, Philip) Modified on 11/28/2016 (nms). (Entered: 11/23/2016)
11/23/2016	203	DECLARATION of John M. Jackson re 201 Joint Claim Construction Brief, by Sonos Inc.. (Attachments: # 1 Exhibits 1-4)(Rovner, Philip) Modified on 11/28/2016 (nms). (Entered: 11/23/2016)
11/23/2016	204	DECLARATION of Steven C. Visser re 201 Joint Claim Construction Brief, by Sonos Inc.. (Attachments: # 1 Exhibits A-B)(Rovner, Philip) Modified on 11/28/2016 (nms). (Entered: 11/23/2016)
11/23/2016	205	Supplemental DECLARATION of Steven C. Visser re 201 Joint Claim Construction Brief, by Sonos Inc.. (Rovner, Philip) Modified on 11/28/2016 (nms). (Entered: 11/23/2016)
11/28/2016	206	Official Transcript of hearing held on November 14, 2016 before Judge Andrews. Court Reporter/Transcriber Valerie Gunning,Telephone number (302) 573-6194. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 12/19/2016. Redacted Transcript Deadline set for 12/29/2016. Release of Transcript Restriction set for 2/27/2017. (vjg) (Entered: 11/28/2016)
11/30/2016	207	REDACTED VERSION of 201 Joint Claim Construction Brief, by Sonos Inc.. (Attachments: # 1 Exhibits 1-5, # 2 Exhibits 6-10, # 3 Exhibit 11 part 1, # 4 Exhibit 11 part 2, # 5 Exhibit 12, # 6 Exhibit 13 part 1, # 7 Exhibit 13 part 2, # 8 Exhibit 14, # 9 Exhibits 15-20, # 10 Exhibit 21)(Rovner, Philip) Modified on 11/30/2016 (nms). (Entered: 11/30/2016)
12/01/2016	208	NOTICE of Final Rejection Concerning U.S. Patent No. D559,197 in Ex Parte Reexamination by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Flynn, Michael) (Entered: 12/01/2016)
12/02/2016	209	Joint STIPULATION to Amend Scheduling Order by Sonos Inc.. (Rovner, Philip) (Entered: 12/02/2016)

LINKPLAY EXHIBIT 1004
Page 333 of 4822

12/05/2016	210	SO ORDERED Granting 209 Joint Stipulation to Amend Scheduling Order, filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 12/5/2016. (nms) (Entered: 12/05/2016)
12/07/2016	211	NOTICE to Take Deposition of Kevin Zarow on December 16, 2016 filed by Sonos Inc..(Rovner, Philip) (Entered: 12/07/2016)
12/13/2016	212	ORAL ORDER: The Markman Hearing set for 12/14/2016, will now commence at 9:30 AM in Courtroom 6A. Ordered by Judge Richard G. Andrews on 12/13/2016. (nms) (Entered: 12/13/2016)
12/14/2016		Minute Entry for proceedings held before Judge Richard G. Andrews - Markman Hearing held on 12/14/2016. Appearances: P. Rovner, G. Lee, R. Shea, M. Boyea, A. Silverstein for Plaintiffs; M. Flynn, J. Jackson, M. Aeosta for Defendants. (Court Reporter Taneha Carroll - Hawkins Reporting Service.) (ksr,) (Entered: 12/15/2016)
12/20/2016	213	Official Transcript of Markman Hearing held on 12-14-16 before Judge Richard G. Andrews. Court Reporter/Transcriber Taneha Carroll. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 1/10/2017. Redacted Transcript Deadline set for 1/20/2017. Release of Transcript Restriction set for 3/20/2017. (lad) (Entered: 12/20/2016)
12/22/2016	214	Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding claim construction. (Flynn, Michael) (Entered: 12/22/2016)
12/22/2016	215	Letter to the Honorable Richard G. Andrews from Philip A. Rovner regarding claim construction. (Attachments: # 1 Exhibit A-C)(Rovner, Philip) (Entered: 12/22/2016)
12/22/2016	216	DECLARATION of John M. Jackson re 214 Letter, by D&M Holdings Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-I)(Flynn, Michael) Modified on 12/28/2016 (nms). (Entered: 12/22/2016)
12/27/2016	217	NOTICE OF SERVICE of Final infringement charts pursuant to paragraph 2 (d) of the Scheduling Order, as amended filed by Sonos Inc..(Rovner, Philip) (Entered: 12/27/2016)
01/09/2017	218	NOTICE to Take Deposition of Christopher Kallai on February 16, 2016 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 01/09/2017)
01/12/2017	219	MEMORANDUM OPINION providing claim construction for multiple terms in dispute in U.S. Patent Nos. 7,571,014, 8,588,949, 8,843,224, 8,938,312, 8,938,637, 9,042,556, 9,195,258, 9,202,509, 9,213,357, 9,219,959, and D559,197. Within five days the parties shall submit a proposed order consistent with this Memorandum Opinion suitable for submission to the jury. Signed by Judge Richard G. Andrews on 1/12/2017. (nms) (Entered: 01/12/2017)
01/17/2017	220	PROPOSED Claim Construction Order, by Sonos Inc.. (Rovner, Philip) Modified on 1/18/2017 (nms). (Entered: 01/17/2017)
01/18/2017	221	CLAIM CONSTRUCTION ORDER. Signed by Judge Richard G. Andrews on 1/18/2017. (nms) (Entered: 01/18/2017)
01/19/2017	222	NOTICE to Take Deposition of Nick Murrells on January 31, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 01/19/2017)
01/19/2017	223	NOTICE to Take Deposition of Samuel Baxter on February 21, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 01/19/2017)
02/01/2017	224	Joint STIPULATION regarding Supplemental Briefing on Motions by Sonos Inc.. (Rovner, Philip) (Entered: 02/01/2017)
02/02/2017	225	ORDER Denying (224 in 14-cv-1330-RGA, 46 in 16-cv-141-RGA) Joint Stipulation. Signed by Judge Richard G. Andrews on 2/2/2017. Associated

LINKPLAY EXHIBIT 1004
Page 334 of 4822

		Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 02/02/2017)
02/06/2017	226	MEMORANDUM OPINION regarding MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct (D.I. 176). Signed by Judge Richard G. Andrews on 2/3/2017. (nms) (Main Document 226 replaced on 2/6/2017) (nms). (Entered: 02/06/2017)
02/06/2017	227	ORDER Denying 176 MOTION for Leave to File an Amended Answer to Add the Defense of Inequitable Conduct. Signed by Judge Richard G. Andrews on 2/3/2017. (nms) (Entered: 02/06/2017)
02/06/2017		CORRECTING ENTRY: The pdf for D.I. 226 has been replaced with the signed version. The NEF has been regenerated to counsel. (nms) (Entered: 02/06/2017)
02/06/2017	228	Joint STIPULATION to Stay Claims Involving U.S. Patent D559,197 by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 02/06/2017)
02/07/2017	229	SO ORDERED Granting 228 Joint Stipulation to Stay Claims Involving U.S. Patent D559,197. Signed by Judge Richard G. Andrews on 2/6/2017. (nms) (Entered: 02/07/2017)
02/08/2017	230	Joint STIPULATION regarding supplemental briefing on Claim Construction, by Sonos Inc.. (Rovner, Philip) Modified on 2/9/2017 (nms). (Entered: 02/08/2017)
02/08/2017	231	Joint STIPULATION to Amend Scheduling Order by Sonos Inc.. (Rovner, Philip) (Entered: 02/08/2017)
02/09/2017		SO ORDERED, re 231 Joint Stipulation To Amend Scheduling Order. Signed by Judge Richard G. Andrews on 2/9/2017. (nms) (Entered: 02/09/2017)
02/09/2017	232	SO ORDERED Granting 230 Joint Stipulation Regarding Supplemental Briefing On Claim Construction. Signed by Judge Richard G. Andrews on 2/9/2017. (nms) (Entered: 02/09/2017)
02/13/2017	233	NOTICE OF SERVICE of Defendants' Amended Objections and Responses to Plaintiff Sonos, Inc.'s First Set of Requests for Admission filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 02/13/2017)
02/15/2017	234	Amended NOTICE to Take Deposition of Christopher Kallai on February 16, 2017, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) Modified on 2/16/2017 (nms). (Entered: 02/15/2017)
02/21/2017	235	NOTICE OF SERVICE of Expert Report of Jay P. Kesan Regarding the Invalidity of Asserted Claims of U.S. 9,219,959, 7,571,014, 8,588,949, 9,042,556, 9,202,509, 8,938,312, 9,213,357, 9,195,258, and 8,938,637 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 02/21/2017)
02/21/2017	236	NOTICE OF SERVICE of Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 02/21/2017)
02/21/2017	237	NOTICE OF SERVICE of Opening Expert Report of Dr. Kevin C. Almeroth [Highly Confidential - Attorneys' Eyes Only/Highly Confidential - Source Code] filed by Sonos Inc..(Rovner, Philip) (Entered: 02/21/2017)
02/28/2017	238	Joint Stipulation to Amend Scheduling Order - filed by Sonos Inc.. (Rovner, Philip) Modified on 2/28/2017 (nms). (Entered: 02/28/2017)
02/28/2017		SO ORDERED, re 238 Joint Stipulation to Amend Scheduling Order (* Reset Deadlines: Dispositive Motions due by 5/11/2017). Signed by Judge Richard G. Andrews on 2/28/2017. (nms) (Entered: 02/28/2017)
03/01/2017	239	

LINKPLAY EXHIBIT 1004
Page 335 of 4822

		ORAL ORDER: The parties have advised that a dispute has arisen requiring judicial attention. The Court will hold a discovery conference on 3/27/2017, at 10:00 AM in Chambers before Judge Richard G. Andrews to take up this issue. In preparation for this hearing the parties shall follow the Discovery Matters and Disputes procedure as set forth in the Scheduling Order. Ordered by Judge Richard G. Andrews on 3/1/2017. (nms) (Entered: 03/01/2017)
03/03/2017	240	Supplemental Opening Brief on Claim Construction, filed by Sonos Inc.. (Attachments: # 1 Exhibit 1)(Rovner, Philip) Modified on 3/6/2017 (nms). (Entered: 03/03/2017)
03/06/2017	241	Disclosure Statement pursuant to Rule 7.1: identifying Corporate Parent Sound United, LLC for D&M Holdings U.S. Inc., Denon Electronics (USA) LLC; Corporate Parent DEI Sales, Inc. for D&M Holdings Inc. filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 03/06/2017)
03/13/2017	242	MEMORANDUM OPINION regarding MOTION for Judgment on the Pleadings (D.I. 116). Signed by Judge Richard G. Andrews on 3/13/2017. (nms) (Entered: 03/13/2017)
03/13/2017	243	ORDER: The MOTION for Judgment on the Pleadings (D.I. 116) is DENIED. Signed by Judge Richard G. Andrews on 3/13/2017. (nms) (Entered: 03/13/2017)
03/17/2017	244	Response to 240 Supplemental Claim Construction Brief, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1-2)(Flynn, Michael) Modified on 3/20/2017 (nms). (Entered: 03/17/2017)
03/22/2017	245	MOTION for Pro Hac Vice Appearance of Attorney Matthew C. Acosta - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 03/22/2017)
03/22/2017	246	SO ORDERED, re 245 MOTION for Pro Hac Vice Appearance of Attorney Matthew C. Acosta, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 3/22/2017. (nms) (Entered: 03/22/2017)
03/23/2017	247	Letter to the Honorable Richard G. Andrews from Philip A. Rovner, Esq. regarding discovery dispute. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 3/23/2017 (nms). (Entered: 03/23/2017)
03/24/2017	248	[SEALED] Letter to The Honorable Richard G. Andrews from Jack B. Blumenfeld regarding Universal Plug and Play. (Attachments: # 1 Exhibits 1-4)(Blumenfeld, Jack) Modified on 3/24/2017 (nms). (Entered: 03/24/2017)
03/24/2017	249	REDACTED VERSION of 248 Letter by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit 1 - 4)(Flynn, Michael) (Entered: 03/24/2017)
03/27/2017		Minute Entry for proceedings held before Judge Richard G. Andrews - Discovery Conference held on 3/27/2017. Appearances: P. Rovner, S. Sullivan, R. Shea for Plaintiff; J. Blumenfeld, J. Jackson for Defendants. (Court Reporter Leonard Dibbs.) (ksr,) (Entered: 03/27/2017)
03/27/2017	250	Joint STIPULATION to amend supplemental briefing on claim construction, by Sonos Inc.. (Rovner, Philip) Modified on 3/28/2017 (nms). (Entered: 03/27/2017)
03/28/2017		SO ORDERED, re 250 Joint Stipulation to Amend Supplemental Briefing on Claim Construction. Signed by Judge Richard G. Andrews on 3/28/2017. (nms) (Entered: 03/28/2017)
03/29/2017	251	Joint STIPULATION to Amend Scheduling Order by Sonos Inc.. (Rovner, Philip) (Entered: 03/29/2017)
03/29/2017	252	

LINKPLAY EXHIBIT 1004
Page 336 of 4822

		Supplemental Reply Brief on Claim Construction, filed by Sonos Inc.. (Attachments: # 1 Exhibits 2-7)(Rovner, Philip) Modified on 3/30/2017 (nms). (Entered: 03/29/2017)
03/30/2017	253	Official Transcript of Discovery Dispute held on 03-27-17 before Judge Richard G. Andrews. Court Reporter/Transcriber Leonard A. Dibbs. Transcript may be viewed at the court public terminal or purchased through the Court Reporter/Transcriber before the deadline for Release of Transcript Restriction. After that date it may be obtained through PACER. Redaction Request due 4/20/2017. Redacted Transcript Deadline set for 5/1/2017. Release of Transcript Restriction set for 6/28/2017. (lad) (Entered: 03/30/2017)
04/03/2017	254	ORDER Denying 251 Joint Stipulation to Amend Scheduling Order (see Order for further details). Signed by Judge Richard G. Andrews on 4/3/2017. (nms) (Entered: 04/03/2017)
04/03/2017	255	Joint STIPULATION to amend the Scheduling Order by Sonos Inc.. (Rovner, Philip) (Entered: 04/03/2017)
04/04/2017		SO ORDERED, re 255 Joint Stipulation to Amend Scheduling Order (* Reset Deadlines: Dispositive/Daubert Motions due by 6/2/2017) (see Stipulation for further due dates). Signed by Judge Richard G. Andrews on 4/4/2017. (nms) (Entered: 04/04/2017)
04/10/2017	256	Joint STIPULATION to Extend Page Limits by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 04/10/2017)
04/10/2017	257	SUR-REPLY in Support of Supplemental Opening Claim Construction Brief, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 4/11/2017 (nms). (Entered: 04/10/2017)
04/11/2017		SO ORDERED, re 256 Joint Stipulation to Extend Page Limits. Signed by Judge Richard G. Andrews on 4/11/2017. (nms) (Entered: 04/11/2017)
04/18/2017	258	NOTICE OF SERVICE of (1) Rebuttal Expert Report of Dr. Harry Bims Regarding Non-Infringement of United States Patent Nos. 9,213,357; 9,195,258; 8,938,637; 8,588,949; 7,571,014; 8,938,312; 9,042,556; 9,202,509; and 9,219,959 Under Federal Rule of Civil Procedure 26(a)(2)(B) and (2) Rebuttal Expert Report of John R. Bone, CPA, CFF filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 04/18/2017)
04/18/2017	259	NOTICE OF SERVICE of Opening Rebuttal Expert Report of Andrew Wolfe [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 04/18/2017)
04/19/2017	260	ORAL ORDER: The parties have advised that a dispute has arisen requiring judicial attention. The Court will hold a discovery conference on 5/18/2017, at 9:00 AM in Chambers before Judge Richard G. Andrews to take up this issue. In preparation for this hearing the parties shall follow the Discovery Matters and Disputes procedure as set forth in the Scheduling Order. Ordered by Judge Richard G. Andrews on 4/19/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 04/19/2017)
04/20/2017	261	Unopposed MOTION for Leave to Supplement Third Amended Complaint Under Federal Rule of Civil Procedure 15(d) - filed by Sonos Inc.. (Attachments: # 1 Exhibits 1-4, # 2 Proposed Order)(Rovner, Philip) Modified on 4/21/2017 (nms). (Additional attachment(s) added on 4/21/2017: # 3 Exhibit 1, # 4 Exhibit 2, # 5 Exhibit 3, # 6 Exhibit 4) (nms). (Entered: 04/20/2017)
04/21/2017		CORRECTING ENTRY: The exhibits found at D.I. 261 have been separated into four pdfs. (nms) (Entered: 04/21/2017)
04/21/2017	262	

LINKPLAY EXHIBIT 1004
Page 337 of 4822

		ORDER Granting 261 Unopposed MOTION for Leave to Supplement Third Amended Complaint Under Federal Rule of Civil Procedure 15(d). Signed by Judge Richard G. Andrews on 4/21/2017. (nms) (Entered: 04/21/2017)
04/21/2017	263	SUPPLEMENTAL THIRD AMENDED COMPLAINT For Patent Infringement against D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC- filed by Sonos Inc..(nms) (Entered: 04/21/2017)
04/26/2017	264	MOTION for Pro Hac Vice Appearance of Attorney Christopher J. Rourk of Jackson Walker, LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 04/26/2017)
04/26/2017	265	MOTION for Pro Hac Vice Appearance of Attorney Wasif Qureshi of Jackson Walker LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 04/26/2017)
04/27/2017		SO ORDERED, re 264 MOTION for Pro Hac Vice Appearance of Attorney Christopher J. Rourk of Jackson Walker, LLP, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc., 265 MOTION for Pro Hac Vice Appearance of Attorney Wasif Qureshi of Jackson Walker LLP, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 4/27/2017. (nms) (Entered: 04/27/2017)
04/27/2017		Pro Hac Vice Attorney Christopher J. Rourk for D&M Holdings Inc.,Christopher J. Rourk for D&M Holdings U.S. Inc.,Christopher J. Rourk for Denon Electronics (USA) LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (crb) (Entered: 04/27/2017)
04/27/2017		Pro Hac Vice Attorney Wasif Qureshi for D&M Holdings Inc., D&M Holdings U.S. Inc., and Denon Electronics (USA) LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (ceg) (Entered: 04/27/2017)
05/05/2017	266	ANSWER to 263 Amended Complaint with Jury Demand, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/5/2017 (nms). (Entered: 05/05/2017)
05/10/2017	267	NOTICE OF SERVICE of Expert Reply Report of Jay P. Kesan Regarding the Invalidity of Asserted Claims of U.S. 9,219,959, 7,571,014, 8,588,949, 9,042,556, 9,202,509, 8,938,312, 9,213,357, 9,195,258, and 8,938,637 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 05/10/2017)
05/10/2017	268	NOTICE OF SERVICE of Reply Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 05/10/2017)
05/10/2017	269	NOTICE OF SERVICE of Reply Expert Report of Dr. Kevin C. Almeroth [Highly Confidential - Attorneys' Eyes Only/ Highly Confidential - Source Code] filed by Sonos Inc..(Rovner, Philip) (Entered: 05/10/2017)
05/11/2017	270	NOTICE to Take Deposition of Andrew Wolfe on May 31, 2017 at 9:00 a.m. filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 05/11/2017)
05/11/2017	271	NOTICE to Take Deposition of Kevin Almeroth on June 2, 2017 at 9:00 a.m. filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 05/11/2017)
05/16/2017	272	[SEALED] Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding motion to compel. (Flynn, Michael) (Entered: 05/16/2017)
05/16/2017	273	

LINKPLAY EXHIBIT 1004
Page 338 of 4822

		[SEALED] DECLARATION of John M. Jackson re 272 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-O)(Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/16/2017	274	REDACTED VERSION of 272 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/16/2017	275	REDACTED VERSION of 273 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/16/2017 (nms). (Entered: 05/16/2017)
05/17/2017	276	Letter to The Honorable Richard G. Andrews from Philip A. Rovner regarding Motion to Compel. (Attachments: # 1 Exhibits A-B)(Rovner, Philip) Modified on 5/17/2017 (nms). (Entered: 05/17/2017)
05/17/2017	277	ORDER Regarding Discovery: The Discovery Conference set for 5/18/2017, at 9:00 AM is POSTPONED (see Order for further details). Signed by Judge Richard G. Andrews on 5/17/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(ksr,) (Entered: 05/17/2017)
05/18/2017	278	[SEALED] Letter to The Honorable Richard G. Andrews from Michael J. Flynn regarding submission pursuant to the Court's May 17, 2017 Order. (Flynn, Michael) Modified on 5/19/2017 (nms). (Entered: 05/18/2017)
05/18/2017	279	[SEALED] DECLARATION of Matthew C. Acosta re 278 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-F)(Flynn, Michael) Modified on 5/19/2017 (nms). (Entered: 05/18/2017)
05/19/2017	280	DECLARATION of Philip A. Rovner re 277 Order, by Sonos Inc.. (Attachments: # 1 Exhibit A)(Rovner, Philip) Modified on 5/19/2017 (nms). (Entered: 05/19/2017)
05/19/2017	281	DISCOVERY ORDER. Signed by Judge Richard G. Andrews on 5/19/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 05/19/2017)
05/19/2017	282	NOTICE OF SERVICE of Sonos, Inc.'s Third Amended Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff; and Sonos, Inc.'s Second Amended Responses to Defendants' Second Set of Interrogatories (Nos. 12-13) to Plaintiff filed by Sonos Inc..(Rovner, Philip) (Entered: 05/19/2017)
05/22/2017	283	NOTICE to Take Deposition of Harry Bims on May 23, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 05/22/2017)
05/22/2017	284	ORAL ORDER: The Discovery Order issued on May 19, 2017, is being revised. The disposition of the order will remain the same. Ordered by Judge Richard G. Andrews on 5/22/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 05/22/2017)
05/24/2017	285	NOTICE OF SERVICE of Sonos, Inc.'s Fourth Amended Responses to Defendant D&M Holdings Inc.'s First Set of Interrogatories (Nos. 1-11) to Plaintiff filed by Sonos Inc..(Rovner, Philip) (Entered: 05/24/2017)
05/25/2017	286	REDACTED VERSION of 278 Letter, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 5/25/2017 (nms). (Entered: 05/25/2017)
05/25/2017	287	REDACTED VERSION of 279 Declaration, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-F)(Flynn, Michael) Modified on 5/25/2017 (nms). (Entered: 05/25/2017)
06/02/2017	288	AMENDED DISCOVERY ORDER (see original Order at 281 in 14-cv-1330-RGA, 85 in 16-cv-141-RGA). Signed by Judge Richard G. Andrews on

LINKPLAY EXHIBIT 1004
Page 339 of 4822

		6/2/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA (nms) (Entered: 06/02/2017)
06/02/2017	289	MOTION for Summary Judgment on four of Defendants' Affirmative Defenses - filed by Sonos Inc.. (Rovner, Philip) Modified on 6/2/2017 (nms). (Entered: 06/02/2017)
06/02/2017	290	OPENING BRIEF in Support re 289 MOTION for Summary Judgment on four of Defendants' Affirmative Defenses, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 6/16/2017. (Rovner, Philip) Modified on 6/2/2017 (nms). (Entered: 06/02/2017)
06/02/2017	291	[SEALED] DECLARATION of Philip A. Rovner re 289 MOTION for Summary Judgment on four of Defendants' Affirmative Defenses, by Sonos Inc.. (Attachments: # 1 Exhibits 1-3)(Rovner, Philip) Modified on 6/2/2017 (nms). (Entered: 06/02/2017)
06/02/2017	292	MOTION to Exclude the Expert Testimony of Attorney Dr. Kesan - filed by Sonos Inc.. (Rovner, Philip) (Entered: 06/02/2017)
06/02/2017	293	[SEALED] OPENING BRIEF in Support re 292 MOTION to Exclude the Expert Testimony of Attorney Dr. Kesan filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 6/16/2017. (Rovner, Philip) (Entered: 06/02/2017)
06/02/2017	294	[SEALED] DECLARATION of Philip A. Rovner re 292 MOTION to Exclude the Expert Testimony of Attorney Dr. Kesan, by Sonos Inc.. (Attachments: # 1 Exhibits A-G)(Rovner, Philip) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	295	MOTION for Partial Summary Judgment of no Invalidity - filed by Sonos Inc.. (Rovner, Philip) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	296	[SEALED] OPENING BRIEF in Support re 295 MOTION for Partial Summary Judgment of no Invalidity, filed by Sonos Inc..Answering Brief/Response due date per Local Rules is 6/16/2017. (Rovner, Philip) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	297	[SEALED] DECLARATION of Philip A. Rovner re 295 MOTION for Partial Summary Judgment of no Invalidity, by Sonos Inc.. (Attachments: # 1 Exhibits A-X)(Rovner, Philip) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	298	[SEALED] MOTION for Summary Judgment of No Direct Infringement - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	299	[SEALED] MOTION to Strike the Expert Opinions of Mr. Michael Tate - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	300	[SEALED] MOTION to Partially Strike Sonos's Expert Opinions - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	301	[SEALED] MOTION for Summary Judgment of No Indirect Infringement - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	302	[SEALED] DECLARATION of Jay P. Kesan re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike The Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc.,

LINKPLAY EXHIBIT 1004
Page 340 of 4822

		Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	303	[SEALED] DECLARATION of Dr. Harry Bims re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017	305	[SEALED] DECLARATION of Matthew C. Acosta re 300 MOTION to Partially Strike Sonos's Expert Opinions, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit 1)(Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/02/2017)
06/02/2017		Set Answering Brief Deadline re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, and 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate. Answering Brief/Response due date per Local Rules is 6/16/2017. (nms) (Entered: 06/05/2017)
06/05/2017		CORRECTING ENTRY: The declaration filed at D.I. 304 has been removed from the docket. Counsel will refile this declaration in a multi-volume set. (nms) (Entered: 06/05/2017)
06/05/2017	306	[SEALED] DECLARATION of John R. Bone re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, and 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Entered: 06/05/2017)
06/05/2017	307	[SEALED] Appendix of Exhibits, Volume 1 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/6/2017 (nms). (Main Document 307 replaced on 6/6/2017) (nms). (Entered: 06/05/2017)
06/05/2017	308	[SEALED] Appendix of Exhibits, Volume 2 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Main Document 308 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	309	[SEALED] Appendix of Exhibits, Volume 3 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/5/2017 (nms). (Main Document 309 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	310	[SEALED] Appendix, Volume 4 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr.

LINKPLAY EXHIBIT 1004
Page 341 of 4822

		Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 310 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	311	[SEALED] Appendix, Volume 5 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 311 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	312	[SEALED] Appendix, Volume 6 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 312 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	313	[SEALED] Appendix, Volume 7 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 313 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	314	[SEALED] Appendix of Exhibits, Volume 8 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 314 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/05/2017	315	[SEALED] Appendix of Exhibits, Volume 9 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 315 replaced on 6/6/2017) (nms). Modified on 6/6/2017 (nms). (Entered: 06/05/2017)
06/06/2017		CORRECTING ENTRY: The pdfs for D.I. 307 through 315 have been replaced. The filings have been amended to reflect they are now an Appendices of Exhibits. (nms) (Entered: 06/06/2017)
06/06/2017	316	[SEALED] APPENDIX of Exhibits, Volume 10 of 10 re 301 MOTION for Summary Judgment of No Indirect Infringement, 300 MOTION to Partially Strike Sonos's Expert Opinions, 298 MOTION for Summary Judgment of No Direct Infringement, 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/6/2017 (nms). (Entered: 06/06/2017)
06/06/2017		Pro Hac Vice Attorney Matthew C. Acosta for D&M Holdings Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (nmg) (Entered: 06/06/2017)

LINKPLAY EXHIBIT 1004
Page 342 of 4822

06/09/2017	317	REDACTED VERSION of 298 MOTION for Summary Judgment of No Direct Infringement by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/09/2017)
06/09/2017	318	REDACTED VERSION of 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/09/2017)
06/09/2017	319	REDACTED VERSION of 300 MOTION to Partially Strike Sonos's Expert Opinions by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/09/2017)
06/09/2017	320	REDACTED VERSION of 301 MOTION for Summary Judgment of No Indirect Infringement by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/09/2017)
06/09/2017	321	REDACTED VERSION of 302 Declaration of Jay P. Kesan, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	322	REDACTED VERSION of 303 Declaration of Dr. Harry Bims, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	323	REDACTED VERSION of 305 Declaration of Matthew C. Acosta, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	324	REDACTED VERSION of 306 Declaration of John R. Bone, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	325	REDACTED VERSION of 307 Appendix, Volume 1 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	326	REDACTED VERSION of 308 Appendix, Volume 2 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	327	REDACTED VERSION of 309 Appendix, Volume 3 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	328	REDACTED VERSION of 310 Appendix, Volume 4 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	329	REDACTED VERSION of 311 Appendix, Volume 5 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	330	REDACTED VERSION of 312 Appendix, Volume 6 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	331	REDACTED VERSION of 313 Appendix, Volume 7 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	332	REDACTED VERSION of 314 Appendix, Volume 8 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	333	REDACTED VERSION of 315 Appendix, Volume 9 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	334	

LINKPLAY EXHIBIT 1004
Page 343 of 4822

		REDACTED VERSION of 316 Appendix, Volume 10 of 10, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/9/2017 (nms). (Entered: 06/09/2017)
06/09/2017	335	REDACTED VERSION of 291 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits 1-3)(Rovner, Philip) Modified on 6/12/2017 (nms). (Entered: 06/09/2017)
06/09/2017	336	REDACTED VERSION of 293 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 6/12/2017 (nms). (Entered: 06/09/2017)
06/09/2017	337	REDACTED VERSION of 294 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-G)(Rovner, Philip) Modified on 6/12/2017 (nms). (Entered: 06/09/2017)
06/09/2017	338	REDACTED VERSION of 296 Opening Brief in Support, by Sonos Inc.. (Rovner, Philip) Modified on 6/12/2017 (nms). (Entered: 06/09/2017)
06/09/2017	339	REDACTED VERSION of 297 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-X)(Rovner, Philip) Modified on 6/12/2017 (nms). (Entered: 06/09/2017)
06/15/2017	340	NOTICE to Take Deposition of Jay P. Kesan on June 16, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 06/15/2017)
06/16/2017	341	[SEALED] ANSWERING BRIEF in Opposition re 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate filed by Sonos Inc..Reply Brief due date per Local Rules is 6/23/2017. (Rovner, Philip) (Entered: 06/16/2017)
06/16/2017	342	[SEALED] DECLARATION of Philip A. Rovner re 341 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibits A-H)(Rovner, Philip) Modified on 6/19/2017 (nms). (Entered: 06/16/2017)
06/16/2017	343	[SEALED] ANSWERING BRIEF in Opposition re 289 MOTION for Summary Judgment on four of Defendants' Affirmative Defenses filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 6/23/2017. (Flynn, Michael) (Entered: 06/16/2017)
06/16/2017	344	[SEALED] ANSWERING BRIEF in Opposition re 292 MOTION to Exclude the Expert Testimony of Attorney Dr. Kesan filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 6/23/2017. (Flynn, Michael) (Entered: 06/16/2017)
06/16/2017	345	DECLARATION of Dr. Jay P. Kesan re 344 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/19/2017 (nms). (Entered: 06/16/2017)
06/16/2017	346	[SEALED] ANSWERING BRIEF in Opposition re 295 MOTION for Partial Summary Judgment of no Invalidity filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 6/23/2017. (Flynn, Michael) (Entered: 06/16/2017)
06/16/2017	347	[SEALED] DECLARATION of John M. Jackson re 346 Answering Brief in Opposition, 344 Answering Brief in Opposition, and 343 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 31-64)(Flynn, Michael) Modified on 6/19/2017 (nms). (Entered: 06/16/2017)
06/16/2017	348	[SEALED] ANSWERING BRIEF in Opposition re 300 MOTION to Partially Strike Sonos's Expert Opinions filed by Sonos Inc..Reply Brief due date per Local Rules is 6/23/2017. (Rovner, Philip) (Entered: 06/16/2017)
06/16/2017	349	[SEALED] DECLARATION of Philip A. Rovner re 348 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibits A-D)(Rovner, Philip) Modified on 6/19/2017 (nms). (Entered: 06/16/2017)
06/16/2017	350	

LINKPLAY EXHIBIT 1004
Page 344 of 4822

		[SEALED] ANSWERING BRIEF in Opposition re 298 MOTION for Summary Judgment of No Direct Infringement filed by Sonos Inc..Reply Brief due date per Local Rules is 6/23/2017. (Rovner, Philip) (Entered: 06/16/2017)
06/16/2017	351	[SEALED] ANSWERING BRIEF in Opposition re 301 MOTION for Summary Judgment of No Indirect Infringement filed by Sonos Inc..Reply Brief due date per Local Rules is 6/23/2017. (Attachments: # 1 Exhibit I-II)(Rovner, Philip) (Attachment 1 replaced on 6/23/2017) (nms). (Entered: 06/16/2017)
06/16/2017	352	[SEALED] DECLARATION of Michael P. Boyea re 351 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibit A-D, # 2 Exhibits E-N, # 3 Exhibits O-T, # 4 Exhibit U part 1, # 5 Exhibit U part 2, # 6 Exhibits V-CC)(Rovner, Philip) Modified on 6/19/2017 (nms). (Attachment 1 replaced on 6/23/2017) (nms). (Attachment 2 replaced on 6/23/2017) (nms). (Entered: 06/16/2017)
06/16/2017	353	[SEALED] DECLARATION of Dr. Kevin C. Almeroth re 351 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 6/19/2017 (nms). (Entered: 06/16/2017)
06/20/2017	354	STIPULATION TO EXTEND TIME for the Parties to file and serve Reply Dispositive/Daubert Motions to June 23, 2017 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/20/2017)
06/21/2017		SO ORDERED, re 354 STIPULATION TO EXTEND TIME to file and serve Reply Dispositive/Daubert Motions to June 23, 2017. Signed by Judge Richard G. Andrews on 6/21/2017. (nms) (Entered: 06/21/2017)
06/21/2017	355	NOTICE to Take Deposition of Michael E. Tate on August 10, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 06/21/2017)
06/22/2017	356	REDACTED VERSION of 343 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/22/2017 (nms). (Entered: 06/22/2017)
06/22/2017	357	REDACTED VERSION of 344 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/22/2017 (nms). (Entered: 06/22/2017)
06/22/2017	358	REDACTED VERSION of 346 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/22/2017 (nms). (Entered: 06/22/2017)
06/22/2017	359	REDACTED VERSION of 347 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/22/2017 (nms). (Entered: 06/22/2017)
06/22/2017	360	Joint STIPULATION regarding Defendants' Daubert Motion by Sonos Inc.. (Rovner, Philip) (Entered: 06/22/2017)
06/23/2017	361	SO ORDERED, re 360 Joint Stipulation Regarding Defendants' Daubert Motions. Signed by Judge Richard G. Andrews on 6/23/2017. (nms) (Entered: 06/23/2017)
06/23/2017		CORRECTING ENTRY: The pdf for the exhibits found at D.I. 351 has been replaced per counsel's request. Typographical errors have been corrected. (nms) (Entered: 06/23/2017)
06/23/2017		CORRECTING ENTRY: The pdf for Exhibits A-D and the pdf for Exhibits E-N found at D.I. 352 have been replaced per counsel's request. Highlighting issues have been corrected. (nms) (Entered: 06/23/2017)
06/23/2017	362	[SEALED] REPLY BRIEF re 295 MOTION for Partial Summary Judgment of no Invalidity filed by Sonos Inc.. (Rovner, Philip) (Entered: 06/23/2017)
06/23/2017	363	

LINKPLAY EXHIBIT 1004
Page 345 of 4822

		[SEALED] DECLARATION of Nicholas Millington re 362 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 6/26/2017 (nms). (Entered: 06/23/2017)
06/23/2017	364	[SEALED] DECLARATION of Philip A. Rovner re 362 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibits Y-EE)(Rovner, Philip) Modified on 6/26/2017 (nms). (Entered: 06/23/2017)
06/23/2017	365	[SEALED] REPLY BRIEF re 298 MOTION for Summary Judgment of No Direct Infringement filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/23/2017)
06/23/2017	366	[SEALED] REPLY BRIEF re 300 MOTION to Partially Strike Sonos's Expert Opinions filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/23/2017)
06/23/2017	367	[SEALED] REPLY BRIEF re 289 MOTION for Summary Judgment on four of Defendants' Affirmative Defenses filed by Sonos Inc.. (Rovner, Philip) (Entered: 06/23/2017)
06/23/2017	368	[SEALED] REPLY BRIEF re 301 MOTION for Summary Judgment of No Indirect Infringement filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 06/23/2017)
06/23/2017	369	[SEALED] DECLARATION of Philip A. Rovner re 367 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibits 4-7)(Rovner, Philip) Modified on 6/26/2017 (nms). (Entered: 06/23/2017)
06/23/2017	370	[SEALED] REPLY BRIEF re 292 MOTION to Exclude the Expert Testimony of Attorney Dr. Kesan filed by Sonos Inc.. (Rovner, Philip) (Entered: 06/23/2017)
06/23/2017	371	[SEALED] DECLARATION of Philip A. Rovner re 370 Reply Brief, by Sonos Inc.. (Attachments: # 1 Exhibits H-K)(Rovner, Philip) Modified on 6/26/2017 (nms). (Entered: 06/23/2017)
06/23/2017	372	[SEALED] DECLARATION of John M. Jackson re 368 Reply Brief, 366 Reply Brief, 365 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 65-66) (Flynn, Michael) Modified on 6/26/2017 (nms). (Entered: 06/23/2017)
06/23/2017	373	SEALED REPLY BRIEF re 299 MOTION to Strike the Expert Opinions of Mr. Michael Tate, filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 6/26/2017 (nms). (Main Document 373 replaced on 6/26/2017) (nms). (Entered: 06/23/2017)
06/26/2017		CORRECTING ENTRY: D.I. 373 has been placed under seal per counsel's request. The cover page for the filing has also been corrected to reflect the filing is under seal. (nms) (Entered: 06/26/2017)
06/26/2017	374	REDACTED VERSION of 341 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	375	REDACTED VERSION of 342 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-H)(Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	376	REDACTED VERSION of 348 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	377	REDACTED VERSION of 349 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits A-D)(Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	378	REDACTED VERSION of 350 Answering Brief in Opposition, by Sonos Inc.. (Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	379	

LINKPLAY EXHIBIT 1004
Page 346 of 4822

		REDACTED VERSION of 351 Answering Brief in Opposition, by Sonos Inc.. (Attachments: # 1 Exhibits I-II)(Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	380	REDACTED VERSION of 352 Declaration of Michael P. Boyea, by Sonos Inc.. (Attachments: # 1 Exhibits A-M, # 2 Exhibits N-CC)(Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/26/2017	381	REDACTED VERSION of 353 Declaration of Dr. Kevin C. Almeroth, by Sonos Inc.. (Rovner, Philip) Modified on 6/27/2017 (nms). (Entered: 06/26/2017)
06/30/2017	382	REDACTED VERSION of 365 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	383	REDACTED VERSION of 366 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	384	REDACTED VERSION of 368 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	385	REDACTED VERSION of 372 Declaration of John M. Jackson, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	386	REDACTED VERSION of 373 Reply Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	387	REDACTED VERSION of 362 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	388	REDACTED VERSION of 363 Declaration of Nicholas Millington, by Sonos Inc.. (Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	389	REDACTED VERSION of 364 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits Y-EE)(Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	390	REDACTED VERSION of 367 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	391	REDACTED VERSION of 369 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits 4-7)(Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	392	REDACTED VERSION of 370 Reply Brief, by Sonos Inc.. (Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
06/30/2017	393	REDACTED VERSION of 371 Declaration of Philip A. Rovner, by Sonos Inc.. (Attachments: # 1 Exhibits H-K)(Rovner, Philip) Modified on 7/5/2017 (nms). (Entered: 06/30/2017)
07/14/2017	394	NOTICE OF SERVICE of Supplemental Expert Report of John R. Bone, CPA, CFF filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 07/14/2017)
07/27/2017	395	NOTICE to Take Deposition of Michael Papish on July 28, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 07/27/2017)
08/03/2017	396	NOTICE to Take Deposition of Michael E. Tate on August 10, 2017 (Amended) filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 08/03/2017)
08/07/2017	397	NOTICE to Take Deposition of John Bone on August 16, 2017 filed by Sonos Inc..(Rovner, Philip) (Entered: 08/07/2017)
08/08/2017	398	

LINKPLAY EXHIBIT 1004
Page 347 of 4822

		NOTICE OF SERVICE of Supplemental Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc..(Rovner, Philip) (Entered: 08/08/2017)
08/10/2017	399	MEMORANDUM OPINION providing claim construction for multiple terms in U.S. Patent Nos. 8,938,637, 9,195,258, 9,202,509, and 9,213,357. Within five days the parties shall submit a proposed order consistent with this Memorandum Opinion suitable for submission to the jury. Signed by Judge Richard G. Andrews on 8/10/2017. (nms) (Entered: 08/10/2017)
08/15/2017	400	PROPOSED Claim Construction Order, by Sonos Inc.. (Rovner, Philip) Modified on 8/16/2017 (nms). (Entered: 08/15/2017)
08/16/2017	401	MOTION for Pro Hac Vice Appearance of Attorney Louis W. Tompros of Wilmer Cutler Pickering Hale and Dorr LLP - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) Modified on 8/17/2017 (nms). (Entered: 08/16/2017)
08/17/2017		SO ORDERED, re (146 in 16-cv-141-RGA, 401 in 14-cv-1330-RGA) MOTION for Pro Hac Vice Appearance of Attorney Louis W. Tompros of Wilmer Cutler Pickering Hale and Dorr LLP, filed by Denon Electronics (USA) LLC, D&M Holdings Inc., D&M Holdings U.S. Inc.. Signed by Judge Richard G. Andrews on 8/17/2017. Associated Cases: 14-cv-1330-RGA, 16-cv-141-RGA(nms) (Entered: 08/17/2017)
08/20/2017	402	STIPULATION to Amend Scheduling Orders, by Sonos Inc.. (Rovner, Philip) Modified on 8/21/2017 (nms). (Entered: 08/20/2017)
08/21/2017	403	CLAIM CONSTRUCTION ORDER. Signed by Judge Richard G. Andrews on 8/21/2017. (nms) (Entered: 08/21/2017)
08/21/2017	404	ORDER DENYING (D.I. 402 in 14-cv-1330-RGA, D.I. 147 in 16-cv-141-RGA) Stipulation to Amend Scheduling Orders. If the Court is unavailable to try the case on October 2, 2017, the Court hopes to have another judge available to try the case. Signed by Judge Richard G. Andrews on 8/21/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA (nms) (Entered: 08/21/2017)
08/21/2017	405	MOTION for Pro Hac Vice Appearance of Attorney Robert P. Latham - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC, D&M Holdings Inc.. (Flynn, Michael) (Entered: 08/21/2017)
08/21/2017		SO ORDERED, re (149 in 16-cv-141-RGA, 405 in 14-cv-1330-RGA) MOTION for Pro Hac Vice Appearance of Attorney Robert P. Latham. Signed by Judge Richard G. Andrews on 8/212/2017. Associated Cases: 1:14-cv-01330-RGA, 1:16-cv-00141-RGA(nms) (Entered: 08/21/2017)
08/24/2017	406	MEMORANDUM ORDER: The Motions for Summary Judgment (D.I. 298 , 301) are DENIED. Signed by Judge Richard G. Andrews on 8/24/2017. (nms) (Entered: 08/24/2017)
08/28/2017	407	NOTICE OF SERVICE of Defendants' Trial Witness List filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 08/28/2017)
08/28/2017	408	NOTICE OF SERVICE of Sonos Inc.'s Witness List and Pretrial Order and exhibits filed by Sonos Inc..(Rovner, Philip) (Entered: 08/28/2017)
08/29/2017	409	ORAL ORDER: Due to a scheduling conflict the Jury Trial set for 10/2/2017, is CONTINUED. The Jury Trial is now reset to commence on 12/11/2017, at 9:30 AM in Courtroom 6A before Judge Richard G. Andrews. The Pretrial Conference scheduled for 9/22/2017, is CANCELED, and will be reset for a date to be determined. Ordered by Judge Richard G. Andrews on 8/29/2017. (nms) (Entered: 08/29/2017)
08/29/2017	410	NOTICE OF SERVICE of (1) Defendants' Notice of Deposition of David Feick and (2) Defendants' Notice of Deposition of Andrew Schulert filed by

LINKPLAY EXHIBIT 1004
Page 348 of 4822

		D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 08/29/2017)
09/14/2017	411	MOTION for Pro Hac Vice Appearance of Attorney Cole B. Richter - filed by Sonos Inc.. (Rovner, Philip) (Entered: 09/14/2017)
09/14/2017		SO ORDERED, re 411 MOTION for Pro Hac Vice Appearance of Attorney Cole B. Richter, filed by Sonos Inc.. Signed by Judge Richard G. Andrews on 9/14/2017. (nms) (Entered: 09/14/2017)
09/15/2017		Pro Hac Vice Attorney Cole B. Richter for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (lmm) (Entered: 09/15/2017)
09/15/2017		Case Reassigned to Judge William C. Bryson of the United States Court of Appeals for the Federal Circuit. Please include the initials of the Judge (WCB) after the case number on all documents filed. (rjb) (Entered: 09/15/2017)
09/25/2017	412	AMENDED SCHEDULING ORDER: Draft Pretrial due by 10/17/2017. Defendant Pretrial due by 10/31/2017. Proposed Pretrial Order due by 11/14/2017. A Final Pretrial Conference is set for 11/17/2017 at a time to be determined before Judge William C. Bryson. A Jury Trial is set for 12/11/2017 at 09:00 AM before Judge William C. Bryson. Signed by Judge William C. Bryson on 9/25/2017. (nmfn) (Entered: 09/25/2017)
09/25/2017	413	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding request for a status teleconference. (Blumenfeld, Jack) (Entered: 09/25/2017)
09/26/2017	414	ORDER re 413 Letter. By 5:00 p.m. on October 3, 2017, each party shall file a letter that suggests, with specificity, steps that could be taken to reduce the number of patents and claims to be tried without prejudicing Sonos's rights. A Telephonic Hearing is set for 10/5/2017 at 02:00 PM before Judge William C. Bryson. The call-in information will be distributed via email to all counsel of record. Signed by Judge William C. Bryson on 9/26/2017. (fms) (Entered: 09/26/2017)
09/26/2017	415	MOTION for Leave to File Plaintiff Sonos, Inc.'s Unopposed Motion for Leave to Supplement its Third Amended Complaint Under Federal Rule of Civil Procedure 15(d) - filed by Sonos Inc.. (Attachments: # 1 Exhibit 1-5, # 2 Text of Proposed Order)(Rovner, Philip) (Entered: 09/26/2017)
09/27/2017	416	ORDER granting 415 MOTION for Leave to File Plaintiff Sonos, Inc.'s Unopposed Motion for Leave to Supplement its Third Amended Complaint Under Federal Rule of Civil Procedure 15(d) filed by Sonos Inc. Plaintiff shall file its Supplemental Third Amended Complaint within two days of this order. Signed by Judge William C. Bryson on 9/27/2017. (fms) (Entered: 09/27/2017)
09/28/2017	417	AMENDED COMPLAINT Second Supplement to Third Amended Complaint against Sonos Inc.- filed by Sonos Inc.. (Attachments: # 1 Exhibit A-BB-1) (Rovner, Philip) (Entered: 09/28/2017)
10/03/2017	418	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding the Court's September 26 Order - re 414 Order,, Set Deadlines/Hearings,. (Attachments: # 1 Exhibits A-E)(Blumenfeld, Jack) (Entered: 10/03/2017)
10/03/2017	419	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding the Court's September 26 Order - re 414 Order,, Set Deadlines/Hearings,. (Rovner, Philip) (Entered: 10/03/2017)
10/05/2017		Minute Entry for proceedings held before Judge William Bryson: Telephonic hearing held on 10/5/2017. Counsel for all parties appeared. Court reporter present. The Court addressed the number of patents, claims, and prior art references to be litigated during bellwether trial. See Dkt. Nos.

LINKPLAY EXHIBIT 1004
Page 349 of 4822

		413 , 414 , 418 , 419 . As discussed on the record, plaintiff's selection by 10/19/17; defendants' selection by 10/26/17.(fms) (Entered: 10/05/2017)
10/06/2017	420	ANSWER to Complaint -- Defendants' Answer to Plaintiffs' Second Supplement to Third Amended Complaint (D.I. 417) -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 10/06/2017)
10/20/2017	421	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding the October 19, 2017 Sonos election of asserted patents. (Attachments: # 1 Exhibit A)(Blumenfeld, Jack) (Entered: 10/20/2017)
10/20/2017	422	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding response to Defendants' letter to Court on October 20, 2017 - re 421 Letter. (Rovner, Philip) (Entered: 10/20/2017)
10/23/2017	423	ORDER re asserted patents and claims re 421 Letter, 422 Letter. (See order for further details). Signed by Judge William C. Bryson on 10/23/2017. (fms) (Entered: 10/23/2017)
10/23/2017	424	Letter to Honorable William C. Bryson from Philip A. Rovner regarding Election of Asserted Claims - re 423 Order. (Rovner, Philip) (Entered: 10/23/2017)
10/24/2017	425	NOTICE of Hearing: A hearing will be held regarding the parties pending summary judgment and Daubert motions on Monday, October 30, 2017, at 1 p.m. Eastern Time in Courtroom 4B, J. Caleb Boggs Federal Building, 844 North King Street, Wilmington, Delaware before Judge William C. Bryson. (See Notice for further details). (fms) (Entered: 10/24/2017)
10/27/2017		ORAL ORDER by Judge William C. Bryson on 10/27/2017: For purposes of the motions hearing to be held on October 30, 2017, any party that intends to rely on authorities not cited in its briefs or the briefs of the opposing party shall notify the Court and the opposing party of those authorities by 5 p.m. Eastern Time on October 27, 2017. (nmfn) (Entered: 10/27/2017)
10/27/2017	426	Letter to The Honorable William C. Bryson from Michael Flynn regarding the Court's October 27, 2017 Oral Order. (Attachments: # 1 Exhibit A) (Flynn, Michael) (Entered: 10/27/2017)
10/30/2017		Minute Entry for proceedings held before Judge William C. Bryson - Oral Argument held on 10/30/2017 regarding pending motions; plaintiff represented by Philip A. Rovner, George I. Lee, Rory P. Shea, John D. Smith, and Sean M. Sullivan; defendants represented by Jack B. Blumenfeld and John M. Jackson. (Court Reporter Hawkins Reporting, (302) 658-6697.) (nmfn) (Entered: 10/31/2017)
11/01/2017	427	MEMORANDUM OPINION AND ORDER granting in part and denying in part D.I. Nos. 292 , 299 , and 300 . Signed by Judge William C. Bryson on 11/1/2017. (fms) (Entered: 11/01/2017)
11/01/2017	428	MEMORANDUM OPINION AND ORDER granting D.I. 295 and granting in part and denying in part D.I. 289 . Signed by Judge William C. Bryson on 11/1/2017. (fms) (Entered: 11/01/2017)
11/02/2017	429	NOTICE of Prior Art References Pursuant to 35 U.S.C. § 282 by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Flynn, Michael) (Entered: 11/02/2017)
11/03/2017	430	SCHEDULING ORDER: As discussed at the hearing held on October 30, 2017, the Court intends for all exhibits to be pre-admitted prior to trial. To that end, as the parties have already exchanged trial exhibits pursuant to Local Civil Rule 16.3(d) and the amended scheduling order dated September 25, 2017, Dkt. No. 412, the Scheduling Orders in this action are amended as follows: by November 16, 2017, the parties shall file with the Court a list containing all exhibits and all objections thereto; the parties shall meet and confer to resolve the objections; and, by November 28, 2017, the parties shall file with the Court a revised list of all exhibits

LINKPLAY EXHIBIT 1004
Page 350 of 4822

		and all objections thereto. The Court will then promptly schedule a telephonic conference to discuss any remaining objections. Signed by Judge William C. Bryson on 11/3/2017. (nmfn) (Entered: 11/03/2017)
11/03/2017	431	MOTION for Pro Hac Vice Appearance of Attorney Jae Y. Pak - filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/03/2017)
11/06/2017		ORDER granting 431 Motion to Appear Pro Hac Vice of Jae Y. Pak - filed by Sonos Inc. Signed by Judge William C. Bryson on 11/6/2017. (js) (Entered: 11/06/2017)
11/06/2017	432	NOTICE to Take Deposition of Cullen Harwood on November 29, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/06/2017)
11/06/2017	433	NOTICE to Take Deposition of Benjamin Rappaport on November 22, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/06/2017)
11/06/2017	434	NOTICE to Take Deposition of Timothy Sheen on December 1, 2017 filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/06/2017)
11/07/2017	435	NOTICE to Take Deposition of Cullen Harwood on November 29, 2017 (Amended) filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.(Flynn, Michael) (Entered: 11/07/2017)
11/07/2017		Pro Hac Vice Attorney Jae Y. Pak for Sonos Inc. added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (lmm) (Entered: 11/07/2017)
11/07/2017		ORDER: The pretrial conference scheduled for November 17, 2017, will be held at 10:00 a.m. and will be held telephonically. The call-in information will be distributed via email to all counsel of record. IT IS SO ORDERED. Signed by Judge William C. Bryson on 11/7/2017. (js) (Entered: 11/07/2017)
11/14/2017	436	ORDER REGARDING TRIAL PROCEDURES. Signed by Judge William C. Bryson on 11/14/2017. (nmfn) (Entered: 11/14/2017)
11/14/2017	437	[SEALED] Letter to The Honorable William C. Bryson from Michael J. Flynn regarding discovery dispute. (Attachments: # 1 Exhibits A-K)(Flynn, Michael) (Entered: 11/14/2017)
11/14/2017	438	[SEALED] Proposed Pretrial Order Joint Proposed Pretrial Order by Sonos Inc.. (Attachments: # 1 Exhibit A-G2)(Rovner, Philip) (Entered: 11/14/2017)
11/14/2017	439	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding limits on Prior Art. (Attachments: # 1 Exhibit A-F)(Rovner, Philip) (Entered: 11/14/2017)
11/14/2017	440	VERDICT SHEET by Sonos Inc. Proposed Verdict Form. (Rovner, Philip) (Entered: 11/14/2017)
11/14/2017	441	Proposed Voir Dire by Sonos Inc.. (Rovner, Philip) (Entered: 11/14/2017)
11/14/2017	442	Proposed Jury Instructions by Sonos Inc. . (Rovner, Philip) (Entered: 11/14/2017)
11/15/2017	443	Letter to the Honorable William C. Bryson from Philip A. Rovner, Esq. regarding Joint Proposed Pretrial Order - re 438 Proposed Pretrial Order. (Rovner, Philip) (Entered: 11/15/2017)
11/15/2017		ORDER: At the telephonic pretrial conference scheduled for November 17, 2017, the parties should be prepared to discuss the motions in limine and the disputes contained in the parties letters, Dkt. Nos. 437 and 439. IT IS SO ORDERED. Signed by Judge William C. Bryson on 11/15/2017. (js) (Entered: 11/15/2017)

LINKPLAY EXHIBIT 1004
Page 351 of 4822

11/15/2017	444	VERDICT SHEET by Sonos Inc. Sonos and D&M's Proposed Verdict Forms. (Rovner, Philip) (Entered: 11/15/2017)
11/16/2017	445	REDACTED VERSION of 438 Proposed Pretrial Order Joint Proposed Pretrial Order by Sonos Inc.. (Attachments: # 1 Exhibit A-H2)(Rovner, Philip) (Entered: 11/16/2017)
11/16/2017	446	[SEALED] Exhibit List Sonos's Initial List of Trial Exhibits and Defendants' Objections by Sonos Inc.. (Rovner, Philip) (Entered: 11/16/2017)
11/16/2017	447	[SEALED] Exhibit List -- Defendants' Initial List of Trial Exhibits and Sono's Objections -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/16/2017)
11/17/2017		Minute Entry for proceedings held telephonically before Judge William C. Bryson: Final Pretrial Conference held on 11/17/2017. Counsel for all parties present. As discussed on the record, an order addressing the issues discussed will follow. (Court Reporter Hawkins Reporting, (302) 658-6697.) (js) (Entered: 11/17/2017)
11/17/2017	448	[SEALED] EXHIBIT re 438 Proposed Pretrial Order Exhibits A-G to Sonos's Motions in Limine (Schedule H1 to the Joint Proposes Pretrial Order (D.I. 438)) by Sonos Inc.. (Rovner, Philip) (Entered: 11/17/2017)
11/21/2017	449	REDACTED VERSION of 448 Exhibit to a Document Exhibits A-G to Sonos's Motions in Limine (Schedule H1 to the Joint Proposes Pretrial Order (D.I. 438)) by Sonos Inc.. (Rovner, Philip) (Entered: 11/21/2017)
11/21/2017	450	REDACTED VERSION of 437 Letter by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibit A - K)(Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	451	REDACTED VERSION of 447 Exhibit List by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/21/2017)
11/21/2017	452	ORDER, The Court hereby ADOPTS the Joint Proposed Pretrial Order (D.I. 438) with modifications as outlined in the order. Signed by Judge William C. Bryson on 11/21/2017. (nmfn) (Entered: 11/22/2017)
11/21/2017	453	MEMORANDUM OPINION AND ORDER re 438 proposed joint pretrial order, the parties' motions in limine, a dispute regarding the election of prior art, and the Court's proposed trial procedures for the bellwether trial scheduled to begin on December 11, 2017. The parties have been directed to meet and confer, and to file with the Court a revised list of deposition designations and exhibits, and objections thereto, by 2:00 p.m. on November 28, 2017. The Court will hold a conference with lead trial counsel for each party on December 5, 2017, beginning at 8:00 a.m. in Washington, D.C., to resolve each remaining objection. Signed by Judge William C. Bryson on 11/21/2017. (nmfn) (Entered: 11/22/2017)
11/24/2017	454	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding Defendants' request for conference - re 453 Memorandum Opinion,,, Order,,. (Blumenfeld, Jack) (Entered: 11/24/2017)
11/27/2017	455	ORDER re 454 Letter. As the parties discussed the issue with the Court in the pretrial conference on November 17, 2017, the Court does not see a need for an additional conference at this time. However, defendants indicate that they wish to file a dispositive motion, and are prepared to do so immediately. Accordingly, defendants may file their motion by 5:00 p.m. Eastern Time on November 28, 2017. Sonos may file a response by 5:00 p.m. Eastern Time on December 1, 2017. After the briefs are filed, the Court will notify the parties whether a conference is required. (See order for further details). Signed by Judge William C. Bryson on 11/27/2017. (fms) (Entered: 11/27/2017)
11/27/2017	456	NOTICE OF SERVICE of Second Supplemental Expert Report of Michael E. Tate [Highly Confidential - Attorneys' Eyes Only] filed by Sonos Inc.. (Rovner, Philip) (Entered: 11/27/2017)

LINKPLAY EXHIBIT 1004
Page 352 of 4822

11/27/2017	457	[SEALED] MOTION for Leave to Submit the Second Supplemental Expert Report of Michael E. Tate - filed by Sonos Inc.. (Attachments: # 1 Exhibit A-E)(Rovner, Philip) (Entered: 11/27/2017)
11/28/2017		ORDER re 457 MOTION for Leave. As defendants indicate that they oppose Sonos's motion for leave, they shall file their opposition no later than 5:00 p.m. on December 4, 2017. IT IS SO ORDERED. Signed by Judge William C. Bryson on 11/28/2017. (js) (Entered: 11/28/2017)
11/28/2017	458	[SEALED] Exhibit List Sonos's Trial Exhibit List by Sonos Inc.. (Rovner, Philip) (Entered: 11/28/2017)
11/28/2017	459	[SEALED] STATEMENT Sonos's Deposition Designations and Defendants' Objections and Counter-Designations by Sonos Inc.. (Rovner, Philip) (Entered: 11/28/2017)
11/28/2017	460	STATEMENT -- Sonos's Objections to Defendants' Deposition Designations -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/28/2017)
11/28/2017	461	[SEALED] Exhibit List -- Defendants' Revised List of Trial Exhibits and Sonos's Objections -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/28/2017)
11/28/2017	462	[SEALED] STATEMENT Sonos, Inc.'s Written Statement of Objections to Defendants' Exhibits, Deposition Designations, and Counter-Designations by Sonos Inc.. (Rovner, Philip) (Entered: 11/28/2017)
11/28/2017	463	[SEALED] MOTION for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent -- - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/28/2017)
11/28/2017	464	[SEALED] DECLARATION re 463 MOTION for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent -- -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1-10)(Flynn, Michael) (Entered: 11/28/2017)
11/28/2017	465	[SEALED] EXHIBIT re 464 Declaration, Exhibits 11-14 to Declaration of John M. Jackson by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 11/28/2017)
11/28/2017	466	REDACTED VERSION of 446 Exhibit List Sonos's Initial List of Trial Exhibits and Defendants' Objections by Sonos Inc.. (Rovner, Philip) (Entered: 11/28/2017)
11/28/2017	467	[SEALED] STATEMENT re 436 Order -- Defendants' Written Statement of Remaining Objections to Sonos's Trial Exhibits and Deposition Designations -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Appendices A-H)(Flynn, Michael) (Entered: 11/28/2017)
11/29/2017	468	ORDER regarding the parties' revised lists of exhibits and deposition designations (D.I. 462 Statement, D.I. 458 Exhibit List, D.I. 461 Exhibit List, D.I. 459 Statement). The Court directs the parties to continue to meet and confer in an effort to reduce the number of each side's exhibits and the number of D&M's objections, as well as to reduce the number of each side's deposition designations and objections to those designations. In the event that the number of objections remaining to be addressed is not substantially reduced by the time of the conference scheduled for Tuesday, December 5, 2017, the parties should be prepared for the likelihood that the conference will consume more than one day. Signed by Judge William C. Bryson on 11/29/2017. (nmfn) (Entered: 11/29/2017)
11/29/2017		

LINKPLAY EXHIBIT 1004
Page 353 of 4822

		Pro Hac Vice Attorney Robert P. Latham for D&M Holdings Inc.,D&M Holdings U.S. Inc.,Denon Electronics (USA) LLC added for electronic noticing. Pursuant to Local Rule 83.5 (d)., Delaware counsel shall be the registered users of CM/ECF and shall be required to file all papers. (crb) (Entered: 11/29/2017)
11/30/2017	469	[SEALED] Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding claim construction issue. (Attachments: # 1 Exhibit A & B)(Blumenfeld, Jack) (Entered: 11/30/2017)
11/30/2017	470	Letter to The Honorable William C. Bryson from Philip A. Rovner regarding claim construction issue - re 469 Letter. (Rovner, Philip) (Entered: 11/30/2017)
11/30/2017	471	ORDER re 470 Letter, 469 Letter. D&M's request to reopen claim construction is DENIED. Signed by Judge William C. Bryson on 11/30/2017. (nmfn) (Entered: 11/30/2017)
12/01/2017	472	[SEALED] ANSWERING BRIEF in Opposition re 463 MOTION for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent -- filed by Sonos Inc..Reply Brief due date per Local Rules is 12/8/2017. (Rovner, Philip) (Entered: 12/01/2017)
12/01/2017	473	[SEALED] DECLARATION re 472 Answering Brief in Opposition, Declaration of Philip A. Rovner by Sonos Inc.. (Attachments: # 1 Exhibit A-B)(Rovner, Philip) (Entered: 12/01/2017)
12/01/2017	474	Letter to The Honorable William C. Bryson from Philip A. Rovner regarding request for continuance. (Rovner, Philip) Modified on 12/5/2017 (fms). (Entered: 12/01/2017)
12/02/2017		ORDER re 474 Letter regarding request for continuance. The defendants are directed to respond to the plaintiff's December 1, 2017, letter to the Court, Dkt. No. 474, no later than 3:00 p.m., Eastern Time, on December 4, 2017. IT IS SO ORDERED. Signed by Judge William C. Bryson on 12/2/2017. (js) (Entered: 12/02/2017)
12/03/2017	475	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding response to Denon's December 1 letter - re 474 Letter. (Blumenfeld, Jack) (Entered: 12/03/2017)
12/03/2017	476	Letter to The Honorable William C. Bryson from Philip A. Rovner, Esquire regarding response to D&M's letter dated today - re 475 Letter. (Rovner, Philip) (Entered: 12/03/2017)
12/03/2017	477	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding reply to Sonos's December 3, 2017 letter - re 476 Letter. (Blumenfeld, Jack) (Entered: 12/03/2017)
12/04/2017	478	ORDER re 477 Letter, 474 Letter. Signed by Judge William C. Bryson on 12/4/2017.This order has been emailed to local counsel. (fms) Modified on 12/5/2017 (fms). (Entered: 12/04/2017)
12/04/2017	479	REDACTED VERSION of 463 MOTION for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/04/2017)
12/04/2017	480	REDACTED VERSION of 464 Declaration, -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1-10)(Flynn, Michael) (Entered: 12/04/2017)
12/04/2017	481	REDACTED VERSION of 465 Exhibit to a Document -- Exhibits 11-14 to Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/04/2017)

LINKPLAY EXHIBIT 1004
Page 354 of 4822

12/04/2017	482	[SEALED] ANSWERING BRIEF in Opposition re 457 MOTION for Leave to Submit the Second Supplemental Expert Report of Michael E. Tate filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC.Reply Brief due date per Local Rules is 12/11/2017. (Flynn, Michael) (Entered: 12/04/2017)
12/04/2017	483	[SEALED] DECLARATION re 482 Answering Brief in Opposition, -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits A-E)(Flynn, Michael) (Entered: 12/04/2017)
12/04/2017	484	REDACTED VERSION of 474 Letter to The Honorable William C. Bryson from Philip A. Rovner regarding request for continuance by Sonos Inc.. (Rovner, Philip) (Entered: 12/04/2017)
12/04/2017	485	[SEALED] STATEMENT Sonos, Inc.'s Updated Written Statement of Objections to Defendants' Exhibits, Deposition Designations, and Counter-Designations by Sonos Inc.. (Rovner, Philip) (Entered: 12/04/2017)
12/04/2017	486	REDACTED VERSION of 457 MOTION for Leave to Submit the Second Supplemental Expert Report of Michael E. Tate by Sonos Inc.. (Attachments: # 1 Exhibit A-E)(Rovner, Philip) (Entered: 12/04/2017)
12/04/2017	487	[SEALED] STATEMENT -- Defendants' Amended Written Statement of Remaining Objections to Sonoss Trial Exhibits and Deposition Designations -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Appendices A-H)(Flynn, Michael) (Entered: 12/04/2017)
12/04/2017	488	[SEALED] Exhibit List -- Defendants' Amended List of Trial Exhibits and Sonos's Objections -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/04/2017)
12/05/2017		TEXT ORDER: As Sonos has not designated any portion of its letter to remain under seal, the clerk is directed to unseal Dkt. Nos. 474 and 478 . IT IS SO ORDERED. By Judge William C. Bryson on 12/4/2017. (fms) (Entered: 12/05/2017)
12/05/2017	489	REDACTED VERSION of 482 Answering Brief in Opposition, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	490	REDACTED VERSION of 483 Declaration -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	491	REDACTED VERSION of 461 Exhibit List by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	492	REDACTED VERSION of 467 Statement, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Appendices A-H)(Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	493	REDACTED VERSION of 469 Letter by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	494	REDACTED VERSION of 487 Statement, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/05/2017	495	REDACTED VERSION of 488 Exhibit List by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/05/2017)
12/06/2017		ORDER: As discussed at yesterday's conference, the Court is troubled by the lack of information regarding the provenance of exhibit PTX1589. In furtherance of the Court's request at the conference, the defendants are

LINKPLAY EXHIBIT 1004
Page 355 of 4822

		ordered to file a letter by 5:00 p.m. Eastern Time on Friday, December 8, 2017, detailing what additional information they have uncovered regarding the document, including the circumstances surrounding its discovery and production. Signed by Judge William C. Bryson on 12/6/2017. (js) (Entered: 12/06/2017)
12/07/2017		ORDER: The Court has been notified that the trial will now be held in Courtroom 4B. In addition, the Court has been notified that the case causing Dr. Almeroth's conflict, as described in Dkt. No. 474, has been settled. As such, there will be no need for Dr. Almeroth to testify out of order. IT IS SO ORDERED. Signed by Judge William C. Bryson on 12/7/2017. (js) (Entered: 12/07/2017)
12/07/2017	496	MEMORANDUM OPINION AND ORDER denying 457 [SEALED] MOTION for Leave to Submit the Second Supplemental Expert Report of Michael E. Tate. Signed by Judge William C. Bryson on 12/7/2017. (nmfn) (Entered: 12/07/2017)
12/07/2017	497	MEMORANDUM OPINION AND ORDER granting 463 MOTION for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent --. Signed by Judge William C. Bryson on 12/7/2017. (nmfn) (Entered: 12/07/2017)
12/07/2017	498	STATEMENT Plaintiff Sonos, Inc.'s Brief in Opposition to Defendants' Hearsay Objections to Sonos's Press Article Exhibits by Sonos Inc.. (Rovner, Philip) (Entered: 12/07/2017)
12/07/2017	499	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding Praise Exhibits. (Attachments: # 1 Exhibit A)(Blumenfeld, Jack) (Entered: 12/07/2017)
12/07/2017	500	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding PTX1589 - re Order,,. (Blumenfeld, Jack) (Entered: 12/07/2017)
12/07/2017	501	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding Sonos's "praise exhibits" - re 499 Letter. (Rovner, Philip) (Entered: 12/07/2017)
12/08/2017	502	MOTION for Reconsideration re 496 Memorandum Opinion denying leave to submit the Second Supplemental Expert Report of Michael E. Tate - filed by Sonos Inc.. (Rovner, Philip) (Entered: 12/08/2017)
12/08/2017	503	ORDER denying 502 MOTION for Reconsideration re 496 Memorandum Opinion denying leave to submit the Second Supplemental Expert Report of Michael E. Tate. Signed by Judge William C. Bryson on 12/8/2017. (nmfn) (Entered: 12/08/2017)
12/08/2017	504	ORDER re evidentiary issues raised in 498 , 499 , 501 . Signed by Judge William C. Bryson on 12/8/2017. (fms) (Entered: 12/08/2017)
12/08/2017	505	REDACTED VERSION of 472 Answering Brief in Opposition, to Motion for Summary Judgment -- Defendants' Motion for Judgment on Absolute Intervening Rights With Respect to The '949 Patent by Sonos Inc.. (Rovner, Philip) (Entered: 12/08/2017)
12/08/2017	506	REDACTED VERSION of 473 Declaration of Philip A. Rovner by Sonos Inc.. (Attachments: # 1 Exhibit A-B)(Rovner, Philip) (Entered: 12/08/2017)
12/08/2017	507	[SEALED] Exhibit List (Defendants' Amended Trial Exhibit List) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Amended Trial Exhibit List)(Flynn, Michael) Modified on 12/11/2017 (nmfn). (Entered: 12/08/2017)
12/09/2017	508	Joint STATEMENT regarding Objections to Opening Demonstratives by Sonos Inc.. (Attachments: # 1 Exhibit A-B)(Rovner, Philip) (Entered: 12/09/2017)
12/09/2017	509	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding clarification of the Court's Order of December 8, 2017 (D.I. 504) - re 504

LINKPLAY EXHIBIT 1004
Page 356 of 4822

		Order. (Attachments: # 1 Exhibit A-D)(Rovner, Philip) (Entered: 12/09/2017)
12/09/2017	510	[SEALED] STATEMENT Sonos, Inc.'s Updated Written Statement of Objections to Defendants' Deposition Designations, and Counter-Designations by Sonos Inc.. (Attachments: # 1 Exhibit A-D)(Rovner, Philip) (Entered: 12/09/2017)
12/09/2017	511	Letter to The Honorable William C. Bryson from Jack B. Blumenfeld regarding admissibility of PTX 1589 - re 504 Order. (Attachments: # 1 Exhibit A & B)(Blumenfeld, Jack) (Entered: 12/09/2017)
12/10/2017		ORDER re 508 , 510 : The parties have raised a number of objections to opening demonstratives. Dkt. No. 508. As to the defendants' objections, slide 25, which includes praise for Sonos's patented feature will be allowed. However, slide 15, which contains text from a "Sound & Vision" article comparing the HEOS and Sonos product lines, may not be presented to the jury. It is in clear violation of the Court's prior rulings regarding the inadmissibility of evidence of copying that is not tied to patented features at issue in this case. See Dkt. No. 504. Although Sonos argues that the defendants failed to raise a timely objection to the exhibit from which the slide was drawn, both parties in their December 9, 2017, submissions have raised untimely objections (to the portion of PTX256 in the case of the defendants and to certain newly contested deposition designations in the case of Sonos). The Court will consider each sides December 9 objections. Sonos's slides depicting each party's marketing materials are permissible, but no suggestion shall be made that the jury draw an inference of copying based on any similarities in those materials. Sonos's depiction of the parties' commercial embodiments and the prosecution history of the patents-in-suit, including reexamination, is also permissible. As to Sonos's objections, the defendants may state on slide 3 that the Denon brand is more than 100 years old, but may not state, unless they can show that it is true, that Denon Electronics (USA), LLC is 107 years old. With regard to slide 13, the Court is unable to view the objected-to animation in the PDF submitted to it, but cannot see anything objectionable in the static slide that has been filed. Finally, with regard to slide 16, there is nothing objectionable about stating Dr. Kesan's credentials. As to Sonos's new objections to the defendants deposition designations and counter-designations, Dkt. No. 510, the Court will consider those objections on the merits, despite their untimeliness. The defendants may respond to those objections by 6:00 p.m. on December 10, 2017. IT IS SO ORDERED. Signed by Judge William C. Bryson on 12/10/2017. (js) (Entered: 12/10/2017)
12/10/2017		ORDER re 509 : By letter, Sonos requests "clarification" of the Court's evidentiary rulings. Dkt. No. 509. First, consistent with the Court's orders, Sonos's experts may rely on inadmissible exhibits in forming their opinions, but may not testify about topics contained in portions of their expert reports that have been struck, nor about documents related to such topics. Sonos's experts also may not disclose the contents of any inadmissible documents until and unless the Court determines that the probative value of the facts or data in those documents in assisting the jury to evaluate the expert's opinion substantially outweighs their prejudicial effect, Fed. R. Evid. 703, a finding that the Court has not been asked to make and has not made with regard to any such documents. Second, if the parties have come to an agreement on PTX296, that exhibit may be introduced with redactions. Third, Sonos may include the designated two additional sentences in PTX1193, as they include praise for the patented group volume feature. Fourth, Sonos may include the additional email header in PTX1312. Fifth, Sonos may include the designated additional sentence in PTX1175. Finally, the defendants' objection to PTX1589 is sustained; the document has limited probative value, as it does not explicitly mention any patent-in-suit, and it may be unduly prejudicial and confusing to the jury without any supporting

LINKPLAY EXHIBIT 1004
Page 357 of 4822

		testimony to explain the documents relevance. IT IS SO ORDERED. Signed by Judge William C. Bryson on 12/10/2017. (js) (Entered: 12/10/2017)
12/10/2017	512	Letter to the Honorable William C. Bryson from Philip A. Rovner regarding withdrawal of remaining objections to D&M's deposition designations - re 510 Statement. (Rovner, Philip) (Entered: 12/10/2017)
12/10/2017	513	Proposed Jury Instructions by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC -- Joint Proposed Jury Instruction on Reexamination. (Flynn, Michael) (Entered: 12/10/2017)
12/10/2017	514	[SEALED] Exhibit List Sonos's Revised Exhibit List by Sonos Inc.. (Rovner, Philip) (Entered: 12/10/2017)
12/11/2017	515	[SEALED] Exhibit List -- Final by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/11/2017)
12/11/2017		CORRECTING ENTRY: D.I. 507 has been placed under seal per request of filer. (nmfn) (Entered: 12/11/2017)
12/11/2017		Minute Entry for proceedings held before Judge William C. Bryson - Jury Trial held on 12/11/2017. (Court Reporter V. Gunning.)(DAY 1) (nmfn) (Entered: 12/11/2017)
12/11/2017	516	Voir Dire Questions read in open court 12/11/2017. (nmfn) (Entered: 12/12/2017)
12/12/2017	517	STATEMENT -- Defendants' Bench Brief by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/12/2017)
12/12/2017	518	STATEMENT Sonos Inc.'s Bench Brief by Sonos Inc.. (Rovner, Philip) (Entered: 12/12/2017)
12/12/2017		Minute Entry for proceedings held before Judge William C. Bryson - Jury Trial held on 12/12/2017. (Court Reporter V. Gunning.)(DAY 2) (nmfn) (Entered: 12/13/2017)
12/13/2017		Minute Entry for proceedings held before Judge William C. Bryson - Jury Trial held on 12/13/2017. (Court Reporter V. Gunning.)(DAY 3) (nmfn) (Entered: 12/14/2017)
12/14/2017	519	STATEMENT Sonos, Inc.'s Bench Brief No. 2 by Sonos Inc.. (Rovner, Philip) (Entered: 12/14/2017)
12/14/2017	520	STATEMENT Defendants' Bench Brief by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 12/14/2017)
12/14/2017	521	Amended STATEMENT Sonos, Inc.'s Bench Brief No. 2 by Sonos Inc.. (Rovner, Philip) (Entered: 12/14/2017)
12/14/2017		Minute Entry for proceedings held before Judge William C. Bryson - Jury Trial held on 12/14/2017. (Court Reporter V. Gunning.)(DAY 4) (nmfn) (Entered: 12/15/2017)
12/15/2017	522	REDACTED VERSION of 507 Exhibit List (Defendants' Amended Trial Exhibit List) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/15/2017)
12/15/2017	523	REDACTED VERSION of 515 Exhibit List (Final) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 12/15/2017)
12/15/2017		Minute Entry for proceedings held before Judge William C. Bryson - Jury Trial completed on 12/15/2017. Closing arguments, jury instructions, deliberations and verdict. (Court Reporter V. Gunning.)(DAY 5) (nmfn) (Entered: 12/18/2017)
12/15/2017	524	Final Jury Instructions read in open court by Judge Bryson 12/15/2017 (nmfn) (Entered: 12/18/2017)

LINKPLAY EXHIBIT 1004
Page 358 of 4822

12/15/2017	525	[SEALED] Jury List. (nmfn) (Entered: 12/18/2017)
12/15/2017	526	[SEALED] Jury Note. (nmfn) (Entered: 12/18/2017)
12/15/2017	527	[SEALED] JURY VERDICT. (nmfn) (Entered: 12/18/2017)
12/15/2017	528	REDACTED JURY VERDICT. (nmfn) (Entered: 12/18/2017)
12/19/2017	529	REDACTED VERSION of 485 Statement of Objections to Defendants' Exhibits, Deposition Designations, and Counter-Designations by Sonos Inc.. (Rovner, Philip) (Entered: 12/19/2017)
12/19/2017	530	REDACTED VERSION of 510 Statement Sonos, Inc.'s Updated Written Statement of Objections to Defendants' Deposition Designations, and Counter-Designations by Sonos Inc.. (Attachments: # 1 Exhibit A-D) (Rovner, Philip) (Entered: 12/19/2017)
12/19/2017	531	REDACTED VERSION of 514 Exhibit List Sonos's Revised Exhibit List by Sonos Inc.. (Rovner, Philip) (Entered: 12/19/2017)
12/21/2017		ORAL ORDER: A Telephone Conference has been scheduled to discuss mediation for January 9, 2018 at 12:00 noon Eastern to be initiated by counsel for Sonos. Ordered by Judge Mary Pat Thynge on 12/21/2017. Associated Cases: 1:14-cv-01330-WCB, 1:16-cv-00141-RGA(dlb) (Entered: 12/21/2017)
01/16/2018	532	ORDER, the parties are to advise the Court whether they favor immediate entry of judgment pursuant to Rule 54(b) and, if so, to advise the Court as to why there is "no just reason for delay" in entering the judgment. The parties' submissions on that issue should be filed no later than January 29, 2018. The Court further directs the parties to meet and confer by January 29, 2018, regarding any proposed motions for a permanent injunction, an ongoing royalty, supplemental damages, or enhanced damages. If the parties are unable to agree on any of those issues, the plaintiff is directed to file a brief by February 12, 2018, addressing any disputed issue regarding those measures of relief. The defendants are directed to file a responsive brief by February 26, 2018. The plaintiff may file a reply by March 5, 2018. Each party's opening submission should include a proposed form of judgment. (See order for further details.) Signed by Judge William C. Bryson on 1/16/2018. (nmfn) (Entered: 01/16/2018)
01/29/2018	533	Joint Letter to the Honorable William C. Bryson from Philip A. Rovner regarding response to the Court's January 16, 2018 order - re 532 Order,,,,. (Rovner, Philip) (Entered: 01/29/2018)
02/07/2018	534	Joint STIPULATION regarding page limits for Post-Trial Motions by Sonos Inc.. (Rovner, Philip) (Entered: 02/07/2018)
02/07/2018	535	ORDER approving 534 Joint STIPULATION regarding page limits for Post-Trial Motions by Sonos Inc. Signed by Judge William C. Bryson on 2/7/2018. (nmfn) (Entered: 02/08/2018)
02/12/2018	536	[SEALED] MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs - filed by Sonos Inc.. (Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	537	[SEALED] POST TRIAL BRIEF in Support of for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs by Sonos Inc.. (Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	538	[SEALED] DECLARATION re 536 MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs Declaration of Michael E.

LINKPLAY EXHIBIT 1004
Page 359 of 4822

		Tate by Sonos Inc.. (Attachments: # 1 Exhibit 1A-9B)(Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	539	[SEALED] DECLARATION re 536 MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs Declaration of J. Dan Smith III by Sonos Inc.. (Attachments: # 1 Exhibit A-E)(Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	540	[SEALED] DECLARATION re 536 MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs Declaration of Philip A. Rovner by Sonos Inc.. (Attachments: # 1 Exhibit A-H)(Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	541	[SEALED] DECLARATION re 536 MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs Declaration of George Lee by Sonos Inc.. (Attachments: # 1 Exhibit 1-2)(Rovner, Philip) (Entered: 02/12/2018)
02/12/2018	542	SEALED MOTION for Judgment as a Matter of Law (Defendants' Renewed Motion for Judgment as a Matter of Law on the Issues of Willful Infringement and Damages) - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Main Document 542 replaced on 2/13/2018) (nmfn,). Modified on 2/14/2018 (fms). (Entered: 02/12/2018)
02/12/2018	543	SEALED DECLARATION re 542 MOTION for Judgment as a Matter of Law (Defendants' Renewed Motion for Judgment as a Matter of Law on the Issues of Willful Infringement and Damages) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1-8, # 2 Exhibits 9-14, # 3 Exhibits 15-17, # 4 Exhibits 18-19, # 5 Exhibits 20-23)(Flynn, Michael) Modified on 2/14/2018 (fms). (Entered: 02/12/2018)
02/13/2018		CORRECTING ENTRY: The pdf of D.I. 542 has been replaced with a corrected version per request of filer. (nmfn) (Entered: 02/13/2018)
02/14/2018		CORRECTING ENTRY: Per request of filer, D.I. Nos. 542 and 543 have been placed under seal. (fms) (Entered: 02/14/2018)
02/14/2018	544	Emergency MOTION for Extension of Time to File Post-Trial Briefing - filed by Sonos Inc.. (Attachments: # 1 Text of Proposed Order)(Rovner, Philip) (Entered: 02/14/2018)
02/19/2018	545	REDACTED VERSION of 542 MOTION for Judgment as a Matter of Law (Defendants' Renewed Motion for Judgment as a Matter of Law on the Issues of Willful Infringement and Damages) by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 02/19/2018)
02/19/2018	546	REDACTED VERSION of 543 Declaration, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1-23)(Flynn, Michael) (Entered: 02/19/2018)
02/20/2018	547	RESPONSE to Motion re 544 Emergency MOTION for Extension of Time to File Post-Trial Briefing filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Blumenfeld, Jack) (Entered: 02/20/2018)
02/20/2018	548	ORDER granting in part and denying in part 544 Motion for Extension of Time to File. Responsive briefs shall be due on March 16, 2018, and reply briefs shall be due on March 30, 2018. Signed by Judge William C. Bryson on 2/20/2018. (fms) (Entered: 02/20/2018)

LINKPLAY EXHIBIT 1004
Page 360 of 4822

02/20/2018	549	REDACTED VERSION of 536 MOTION for (I) Enhanced Damages, (II) a Permanent Injunction, or in the Alternative, Ongoing Royalties, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs by Sonos Inc.. (Rovner, Philip) (Entered: 02/20/2018)
02/20/2018	550	REDACTED VERSION of 537 POST Trial Brief, by Sonos Inc.. (Rovner, Philip) (Entered: 02/20/2018)
02/20/2018	551	REDACTED VERSION of 538 Declaration, of Michael E. Tate by Sonos Inc.. (Attachments: # 1 Exhibit 1A-9B)(Rovner, Philip) (Entered: 02/20/2018)
02/20/2018	552	REDACTED VERSION of 539 Declaration, of J. Dan Smith III by Sonos Inc.. (Attachments: # 1 Exhibit A-E)(Rovner, Philip) (Entered: 02/20/2018)
02/20/2018	553	REDACTED VERSION of 540 Declaration, of Philip A. Rovner by Sonos Inc.. (Attachments: # 1 Exhibit A-H)(Rovner, Philip) (Entered: 02/20/2018)
02/20/2018	554	REDACTED VERSION of 541 Declaration, of George Lee by Sonos Inc.. (Attachments: # 1 Exhibit 1-2)(Rovner, Philip) (Entered: 02/20/2018)
03/16/2018	555	ANSWERING BRIEF in Opposition re 542 MOTION for Judgment as a Matter of Law (Defendants' Renewed Motion for Judgment as a Matter of Law on the Issues of Willful Infringement and Damages) filed by Sonos Inc..Reply Brief due date per Local Rules is 3/23/2018. (Rovner, Philip) (Entered: 03/16/2018)
03/16/2018	556	DECLARATION re 555 Answering Brief in Opposition, Declaration of Philip A. Rovner In Support of Plaintiff's Opposition to Defendants' Renewed Motions For Judgment as a Matter of Law on the Issues of Willful Infringement and Damages by Sonos Inc.. (Attachments: # 1 Exhibit A-B) (Rovner, Philip) (Entered: 03/16/2018)
03/16/2018	557	[SEALED] POST TRIAL BRIEF -- Defendants' Brief in Opposition to Plaintiff Sonos, Inc.'s Motion for (I) Enhanced Damages, (II) A Permanent Injunction, (III) Attorneys' Fees, (IV) Supplemental Damages, (V) Prejudgment Interest, (VI) Post-Judgment Interest, and (VII) Costs -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 03/16/2018)
03/16/2018	558	[SEALED] DECLARATION re 557 POST Trial Brief, -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1 to 3-G)(Flynn, Michael) (Entered: 03/16/2018)
03/16/2018	559	REDACTED VERSION of 557 POST Trial Brief, by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 03/16/2018)
03/16/2018	560	REDACTED VERSION of 558 Declaration -- Declaration of John M. Jackson -- by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Attachments: # 1 Exhibits 1 to 3-G)(Flynn, Michael) (Entered: 03/16/2018)
03/19/2018	561	NOTICE of Final Rejection Concerning U.S. Patent No. 9,213,357 in Ex Parte Reexamination by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC (Flynn, Michael) (Entered: 03/19/2018)
03/28/2018	562	Joint STIPULATION TO EXTEND TIME for parties to file their reply briefs on post-trial issues to April 20, 2018 - filed by Sonos Inc.. (Rovner, Philip) (Entered: 03/28/2018)
03/28/2018		SO ORDERED re 562 Joint STIPULATION TO EXTEND TIME for parties to file their reply briefs on post-trial issues to April 20, 2018. Ordered by Judge William C. Bryson on 03/28/2018. (js) (Entered: 03/28/2018)
04/16/2018	563	STIPULATION TO EXTEND TIME for Parties to File their Reply Briefs on Post-Trial Issues to May 4, 2018 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 04/16/2018)

LINKPLAY EXHIBIT 1004
Page 361 of 4822

04/16/2018		SO ORDERED re 563 STIPULATION TO EXTEND TIME for Parties to File their Reply Briefs on Post-Trial Issues to May 4, 2018. Signed by Judge William C. Bryson on 04/16/2018. (js) (Entered: 04/16/2018)
05/03/2018	564	Joint STIPULATION TO EXTEND TIME for Parties to File Their Reply Briefs on Post-Trial Issues to May 18, 2018 - filed by D&M Holdings Inc., D&M Holdings U.S. Inc., Denon Electronics (USA) LLC. (Flynn, Michael) (Entered: 05/03/2018)
05/04/2018		SO ORDERED re 564 Joint STIPULATION TO EXTEND TIME for Parties to File Their Reply Briefs on Post-Trial Issues to May 18, 2018. Signed by Judge William C. Bryson on 5/4/2018. (js) (Entered: 05/04/2018)

Copyright © 2018 LexisNexis CourtLink, Inc. All rights reserved.
*** THIS DATA IS FOR INFORMATIONAL PURPOSES ONLY ***

LINKPLAY EXHIBIT 1004
Page 362 of 4822

Objects

9213357 or 9,213,357

All authorities

LINKPLAY EXHIBIT 1004
Page 363 of 4822

[invalid number] families found out of [invalid number] records searched

Publications Families

Publication number	Publication date	Title
No rows to show		

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

Secondary Materials (1) **Sort by:** Relevance

1. CW001 ALI-ABA 535

THE ART OF MAKING A GIFT OR A SALE TO A TRUST OF A DIFFICULT TO VALUE ASSET THAT LIMITS ADDITIONAL GIFT TAX LIABILITY Goldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kindGoldman Sachs does not provide accounting, tax or legal advice to its clients and all investors are strongly urged to consult with their own advisors before implementing any structure, investment plan or strategy. Notwithstanding anything in this document to the contrary, and except as required to enable compliance with applicable securities law, you may disclose to any person the US federal and state income tax treatment and tax structure of the transaction and all materials of any kind (including tax opinions and other tax analyses) that are provided to you relating to such tax treatment and tax structure, without Goldman Sachs imposing any limitation of any kind

Content
CLE Course of Study Materials
Jurisdiction
Non-jurisdictional
Date
Jul 01, 2014

By S. Stacy Eastland, ALI CLE COURSE OF STUDY MATERIALS

... Year 8 9,012,543 180,251 450,627 - 279,327 - Year 9 **9,213,357** 184,267 460,668 - 295,593 - Year 10 9,415,617 188,312 470,781 ... ... 8,812,917 Year 7 (238,810) (441,376) 9,012,543 Year 8 (245,975) (463,416) **9,213,357** Year 9 (253,354) (484,914) 9,415,617 Year 10 (260,955) (506,275) 10,381,800 ...

Content type: Secondary Materials
Terms: 9213357 or 9,213,357
Search Type: Boolean - Fewer Results
Narrow By: None
Date and Time: May 10, 2018 10:16:45 a.m. EDT

LINKPLAY EXHIBIT 1004
Page 365 of 4822

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group®

Lexis Advance®
Research

Results for: 9213357 or 9,213,357

News (10) **Sort by:** Relevance

1. U.S. Patents Awarded to Inventors in California (Dec. 16)

Targeted News Service, 10776 words

Date
Dec 16, 2015

... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,357**&RS=PN/**9,213,357** Written by Amal Ahmed; edited by Jaya Anand. *** Cisco ...
... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

2. Undercarriage Replacement of Be1000-1 Hyd. Excavator Sr. No. G10116

Tenders Monitor Africa-Asia, 130 words

Date
Apr 19, 2018

... Date: 18-Apr-2018 01:00 PM Document : http://www.bidsinfo.com /adminexe/documents/-IN1~20180419-**9213357**.html...

3. No Headline In Original

Diário Oficial do Estado da Paraíba, PAGINAS SEM CADERNO; Pg. 1, 2224 words

Date
Dec 08, 2017

... marco A63 de coordenada Norte (Y) 9.213.318,13 m, Este (X) 283.324,26 ...

4. Sonos Assigned Patent

Targeted News Service, 124 words

Date
Dec 16, 2015

... The full-text of the patent can be found at http://patft.uspto.gov/netacgi/nph-Parser?Sect1=PTO1&Sect2=HITOFF&d=PALL&p=1&u=%2Fnetahtml%2FPTO%2Fsrchnum.htm&r=1&f=G&l=50&s1=**9,213,357**.PN.&OS=PN/**9,213,**

LINKPLAY EXHIBIT 1004
Page 367 of 4822

357&RS=PN/**9,213,357** Written by Amal Ahmed; edited by Jaya Anand. For more ...
... Barbara , California , has been assigned a patent (**9,213,357**) developed by Nicholas A.J. Millington, Santa Barbara , ...

5. US District Court"s order in the case of SONOS, INC., Plaintiff, v. D&M HOLDINGS, INC. d/b/a THE D+M GROUP, D&M HOLDINGS U.S. INC., and DENON ELECTRONICS (USA), LLC, Defendants.

US Official News, 3494 words

Date
Aug 11, 2017

... 9,195,258 ("the '258 Patent"), 9,202,509 ("the '509 Patent"), and **9,213,357** ("the '357 Patent). The Court has considered the Parties' Supplemental ...

6. Weekly: Flowserve plummets 16.0% in 3 weeks; nears a 26-month low August 11, 2017 16:00 EDT

News Bites US Markets, 5109 words

Date
Aug 11, 2017

... 376,573 Rhumbline Advisers (9,620) 373,545 Sumitomo Mitsui Trust Holdings, Inc. **9,213 357** ,741 Ameriprise Financial Inc. (9,193) 356,964 Gabelli Funds LLC (9,000) 349,470 ...

7. Head Line: US Patent granted to Sonos, Inc (California) on December 15, 2015 titled as "Obtaining content from remote source for playback"

Plus Patent News, 188 words

Date
Dec 16, 2015

... States Patent and Trademark Office has granted patent no. **9,213,357** on December 15, 2015, to Sonos, Inc (...

8. Colt Group S.A. Director/PDMR Shareholding

London Stock Exchange Aggregated Regulatory News Service (ARNS), 960 words

Date
Mar 28, 2013

... calculating percentage) **9. 213,357** ...

9. Weekly output, 1-million kWh

Electrical World, REGIONAL REPORT; Vol. 206, No. 7; Pg. 23, 356 words

Date
Jul 01, 1992

... Eng 2106 -3.1 52,146 +0.1 113,689 +0.3 Mid Atlan. 7708 -3.3 179,304 -0.1 400,751 +1.4 Cent. Industrial 11,326 -8.6 268,092 -1.2 604,974 +1.7 West

LINKPLAY EXHIBIT 1004
Page 368 of 4822

Central 4073 -10.7 93,101 -1.9 **213,357** +0.8
Southeast 14,014 -0.9 300,173 +0.5 683,224 +1.6
South Cent. 8341 -1.1 166,594 -2.7 389,353 -0.5
Rocky Mt.
3136 +7.7 65,578 +4.1 148,283 +2.6 ...

10. Kontron Mikroelektronik

GlobalAdSource (German), 27 words

Date

Dec 12, 2008

... USD Media Type Print Country Germany Source MARKT & TECHNIK Product ...

Content type: News
Terms: 9213357 or 9,213,357
Search Type: Boolean - Fewer Results
Narrow By: Sources: News
Date and Time: May 10, 2018 10:17:40 a.m. EDT

LexisNexis® About LexisNexis® Privacy Policy Terms & Conditions Sign Out Copyright © 2018 LexisNexis. All rights reserved. RELX Group™

LINKPLAY EXHIBIT 1004
Page 369 of 4822

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 03/16/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
03/16/2018	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

MR. CHRISTOPHER JOHN ROURK
JACKSON WALKER LLP
2323 ROSS AVENUE
SUITE 600
DALLAS, TX 75201

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/013,959*.

PATENT NO. _.

ART UNIT *3992*.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

David E. England

Primary Examiner

PTOL-465 (Rev.07-04)

DETAILED EX PARTE REEXAMINATION FINAL OFFICE ACTION

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

I. INTRODUCTION

This is a Final Office Action on the merits in the *Ex Parte* Reexamination of claims 9 – 12 and 19 of US Patent No. US 9,213,357 to Millington, hereinafter "the '357 Patent". This Final Office Action is in response to Patent Owner's, hereinafter "the PO", Response to Office Action dated 12/20/2017, hereinafter "PO's Response", which is in response to a Non-Final Office Action mailed 10/20/2017 of the *Ex Parte* Reexamination of claims 9 – 12 and 19 of the '357 Patent.

The PO's Response dated 12/20/2017 has been entered. The current status of the claims of the '357 Patent are as follows:

- Claims 9 – 12 and 19 stood rejected as of the Non-Final Office Action dated 10/20/2017.

A. References Cited in this Office Action

1. The prior art patents and/or printed publications, hereinafter "the references", which have been submitted 08/22/2014, have been considered and are relied upon in this Office Action are relisted as follows.

a. U.S. 9,195,258 to Nicholas A. J. Millington, filed February 20, 2014, issued November 24, 2015 (hereinafter "the '258 Patent");

b. The MP3 and Internet Audio Handbook, Brace Fries and Marty Fries, TeamCom Books (2000) (hereinafter the "Handbook");

c. U.S. 6,611,537 to Edens et al., filed May 15, 1998, issued August 26, 2003 (hereinafter "Edens");

d. U.S. 2004/0252400 to Blank et al., filed June 13, 2003, published December 16, 2004 (hereinafter "Blank");

e. U.S. 2002/015003 to Gray et al., filed April 17, 2001, published October 17, 2002 (hereinafter "Gray");

f. Admitted Prior Art (APA) in the '357 Patent and other related Sonos patents (hereinafter the "SONOS APA").

B. Reexam Prosecution Summary

1. In the Ex Parte Reexamination Request filed on 05/22/2017, by the Requester, the references were relied upon for providing a new technical teaching that would raise a Substantial New Question, "SNQ", of patentability.

2. A Notice of Incomplete Ex Parte Reexam Request was filed 05/25/2017, see notice.

3. A Receipt of Corrected Original Ex Parte Request was received 06/16/2017, correcting the error and submitting the actual Substantial New Question, "SNQ", of patentability against claims 9 – 12, and 19, See The Request, dated 06/16/2017.

4. An Order Granting Ex Parte Reexamination was filed 08/09/2017. In the Order, it was agreed that the teachings of,

a. Edens in combination with at least Sonos APA, and Blank in combination with at least Gray and Sonos APA raised a SNQ of patentability as to

at least claim 9, of the '357 Patent, and a Double Patenting rejection in view of 9,195,258, See The Order.

5. A Non-Final Office Action was filed on 10/20/2017 rejecting claims 9 – 12 and 19 under 35 U.S.C. 103(a) and a Double Patenting rejection.

6. An Interview was conducted 11/16/2017 with Attorneys of record to discuss multiple points of the claimed invention.

7. A Response to the Non-Final Office Action was filed 12/20/2017 elaborating the arguments made in the interview. A Declaration Pursuant to 37 C.F.R. § 1.132 and a Terminal Disclaimer was filed with the Response.

II. RESPONSE TO ARGUMENTS

Patent Owner's remarks/arguments, pages 9 – 34, have been considered, entered, and will now be discussed below. The Examiner acknowledges the Declaration Pursuant to 37 C.F.R. § 1.132 filed 12/20/2017. The Terminal Disclaimer filed 12/20/2017 has been approved.

Response to Filing of Terminal Disclaimer.

PO as filed a Terminal Disclaimer to overcome the Double Patenting rejection. The Terminal Disclaimer was approved on 12/21/2017. The Double Patenting rejection has been overcome and is withdrawn.

Response to the Edens, Handbook, and the APA rejection.

PO argues the rejection made in view of the above mentioned prior art, see PO Response, pp. 10 – 20. More specifically, the PO argues that the prior art of Edens does not teach "transmit, via the network interface of the first playback device to a second playback device… playback timing information associated with the audio information". PO states that since the network topology of Edens generates frames at a consistent rate, 44.1kHz, there is no need for playback timing information since when the information is sent it is automatically played and therefore no playback timing information associated with the audio information is actually sent.

Upon further review of the prior art, the Examiner finds the PO's arguments persuasive. The prior art of Edens utilized the frame size to synchronize all other devices to the network clock and play the audio information instantly. As the claim is interpreted, the "playback timing information associated with the audio information" is actual data put into the frame or packet and transferred to other devices. The data size of Edens' frames could not be interpreted as the actual information in the frame/packet. Therefore playback timing information associated with the audio information is not needed in Edens because of the network topology and use of Edens' frame, i.e., Edens teaches away from needing playback timing information associated with the audio information sent in a frame since the size of the frame dictates the playback time, not the information in the frame, see PO Response, pp. 10 – 20. Wolfe's Declaration also highlights this finding, see Wolfe Dec. ¶¶ 28 – 34, and 37. Therefore, the rejection in view of Edens, Handbook, and the APA is withdrawn.

Response to the Blank, Gray and the APA rejection.

PO argues the rejection made in view of the above mentioned prior art, see PO Response, pp. 20 – 34. The PO's arguments are broken down into sections and will be addressed in the same manner.

PO argues that Blank, Gray, and the APA, fail to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information", See section 'i.' of the PO's Response pp. 21 - 23. PO argues that Blank does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on playback timing information that the first media synch player also sends to another media synch player. PO specifically states that no teaching in Blank suggests the Office's combination of Blank's media synch player 110 and control console 125. PO further argues that the combination of Blank and Gray does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on a "frame-specific time stamp" that the first media synch player also sends to another media synch player. PO also relies on the Wolfe Dec., ¶¶ 40-43, 47, and 48 to support their arguments.

As to the Blank argument, it is clearly seen in the rejection the obviousness rejection and use of KSR in the rejection quoting sections of the MPEP and known court cases relied upon to support the rational of the rejection, i.e., combination of the two devices would have yielded a predictable results to one of ordinary skill in the art at the time of the invention. In this case, two

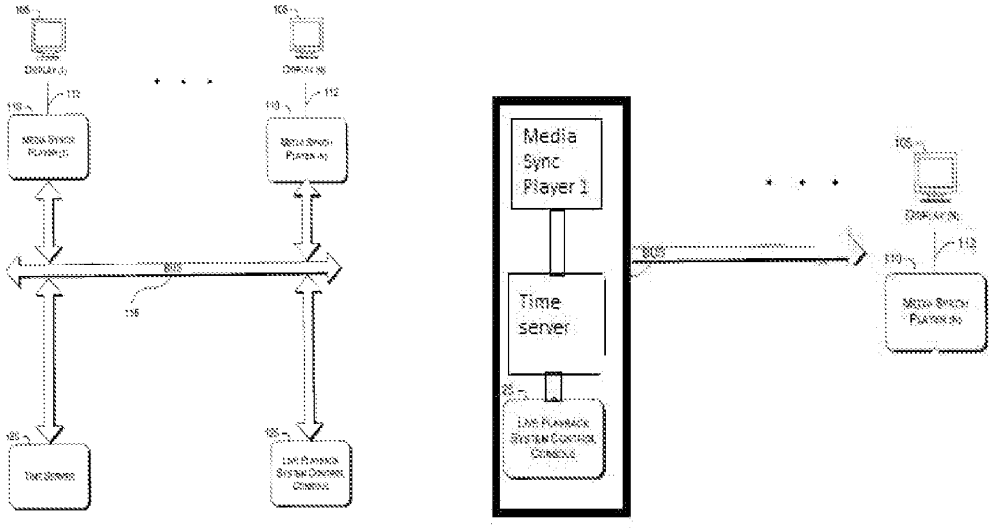
devices housed in the same "box". The devices would not perform any other unexpected function other than what they are programed to do and do not require undue experimentation to determine other different results. This type of computer combination is performed all the time. For Example, a system could have an email server, printer server, web server, or other types of servers as separate machines scattered around in a network or combine these servers into one server or "box" and the functions of those separate server would not be any different, the only difference would be the location of the servers.

As to the Gray argument, it is seen that the time stamp that is used in Gray in construction 2 of the rejection is used to render the information received by the receiver application, (see Gray ¶¶ 0069, 0076 - 0078 and 0089 - 0090). The time stamp specifically state in paragraph 0069 of Gray is further elaborated on in paragraphs 0076 – 0078. More specifically the time stamp represents the relative time that the information in the multimedia packet should be rendered by the receiver application, (i.e., when to play the multimedia information). As noted before, the claim limitation "playback timing information associated with the audio information", emphasis added, does not give clear indication as to how the playback timing information is "associated" with the audio information. The BRI could be as broad as if the playback timing information is in the same packet as the audio information and therefore they are "associated" with each other. The teachings of Blank or Blank in view of Gray teaches play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and device clock information of the first playback device to play back the audio information.

Response to the Blank, Gray and the APA argument (ii).

PO argues that the proposed modification and combination of Blank and Gray is based on hindsight reasoning that uses Patentee's claims as a roadmap, (See PO arguments pp. 23 – 28). In these arguments, PO cites multiple court cases stating that the prior art does not suggest any such combination of the references let alone the Examiner's combination of Blank's devices into one device that teaches the claimed invention.

As to these arguments, the combination of devices to create one device is not new to the art of computer networking let alone the computer art. As stated above in the previous response to PO's arguments, it is well known in the art that one can combine different servers to be housed in one box and would not change the function of each server, i.e., the email server would still sent and receive email and a printer server would still send and receive print requests. The integration of the devices stated in the rejection would have yielded a predictable result of the devices performing their programed functions. In the case of Blank, the values of time 't' and delay indication 'd' would be in reference to the combined devices as one devices, (Blank ¶0044). The integration of the devices stated in the rejection would not make an overly complicated devices as suggested by the PO since it would still be the same two devices connected by an interface of some type and housed in the same "box". Examples of such modification are shown below.



As seen the bus used to communicate to the multiple Media Synch Players (n) would still be connected to the same bus and still go to "all the devices" that are housed in one box, also see rejection.

As stated in the rejection, to make these separate components of Blank integral would only take one of skill in the art to combine and would not require undue experimentation and would yield the predictable result of the devices still perform their programed functions, only in a different location. The integration of devices would not be overly complicated as suggested by the PO and Wolfe's Dec. since there is no difference in how the components interact with one another. Such an integration is not beyond the ability or knowledge of one of ordinary skill in the art since making devices integral is not only well known in the art, See MPEP 2144.04(V)B., but would have led to a reasonable expectation of success as also set forth in view of KSR, (i.e., not only have servers been combine to make one device but also the multiple technologies have been added into cell phones).

Response to the Blank, Gray and the APA argument (iii).

PO argues that a person of skill in the art would not have any reason to modify and combine the disparate devices in Blank and Gray and then configure those devices to perform the functions recited in the claims as proposed in the office Action, (See PO arguments pp. 28 – 30).

As to this argument, it is seen in Blank, ¶ 0045, that Gray is "assigned to the assignee of the present application and which is hereby incorporated herein by reference." PO argues that Gray is a WAN solution and Blank mentions that "other types of interconnections are also possible, including fiber optic communication, LANs, WANs or the Internet or any other data network", but they could not work together. It is seen in Gray ¶ 0090 that the network may be implemented in an IEC 802.11 wireless network, i.e., wireless LAN. Blank, as stated by the PO, teaches LANs and "any other data network", which under BRI is an IEC 802.11 wireless LAN.

Response to arguments (a) and (b).

PO argues that (a) "there is no motivation to combine the functions of Blank's media synch player, time server, and control console into the hypothetical consolidated device as proposed in the Office Action", and (b) "There is no motivation to modify the system in Blank to use the time stamps in Gray for synchronous media playback as proposed in the Office Action", (See PO arguments pp. 30 – 34).

As to argument (a), this argument has been similarly covered in the response to arguments above. Firstly, it is seen in Blank, ¶ 0045, that Gray is "assigned to the assignee of the present application and which is hereby incorporated herein by reference." PO seems to only argue Gray's synchronization of display and audio information, which would make the

combination of Blank's and Gray's devices extremely complicated and costly. As stated above, this combination would still be the devices as stated, merely in one box. There is clear overlap of technology and applying such would merely take one of skill in the art to program such. Furthermore, Gray clearly teaches their system being used with audio systems, see Gray ¶ 0037, "**Audio** system 216 may be a speaker, a stereo system, or any device capable of emitting sound data, and similarly may be integrally positioned with **or separate from display device** 214." It is further clear that Blank discloses audio and video content, See Blank ¶ 0020, "The following disclosure describes methods and apparatus for providing synchronized **displays** from two or more digital data sources. The **displays** typically include both **audio and video** content."

As to argument (b), the Examiner has given reasons for combining the reference as in different manners, see rejection. To further rebut PO arguments, as previously stated Blank as incorporated by reference Gray. In Blank paragraph 0045, as previously cited, it states:

> "[0045] Time information is also present in the individual clocks of the media synch **players** 110. This time information may be transmitted in a non-isosynchronous manner back to the time server 120 and combined with time information derived from the time server to speed up or slow down rendering of the clocks 212 in the individual media synch **players** 110. A more detailed description of the use of common time to **convert** a non-isosynchronous network to an isosynchronous network can be found in U.S. patent application Ser. No. 09/863,834, filed on Apr. 17, 2001 (Published Application No. 20020150053 A1, published on Oct. 17, 2002), entitled "Methods And Systems For Distributing Multimedia Data Over Heterogeneous Networks", listing Donald M. Gray et

al. as inventor(s), which is assigned to the assignee of the present application and which is hereby incorporated herein by reference."

Therefore, not only would one of skill in the art be motivated as stated in the rejection but one would also be motivated to combine Gray to Blank in the case where one may need to convert information from a non-isosynchronous network to an isosynchronous network. This would also lead to the combination of Blank and Gray having the ability to adapt to different network systems to reach a larger group of consumers.

III. REJECTIONS

CLAIM INTERPRETATION

During examination, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims. See MPEP §2111, MPEP §2111.01 and *In re Yamamoto et al.*, 222 USPQ 934 (Fed. Cir. 1984). Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification. See MPEP 2111.01(I). It is further noted it is improper to import claim limitations from the specification, i.e., a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment. See MPEP 2111.01(II). Therefore, unless one of the exceptions applies below, Examiners will interpret the limitations of the claims using the broadest reasonable interpretation.

As noted in the Order of this current application, the 3PR makes specific mention of two specific limitations, within the limitation which is the basis of the SNQ, which require attention in determining what their BRI encompasses, pp. 24 - 28 of the Request, limitations "independently clocked" and "playback timing information".

"independently clocked"

The 3PR has pointed out that the limitation of "independently clocked" could have multiple meanings, and because of the PO's concurrent litigation, could also encompass syncronized clocks, see p. 26 of the Request. When reviewing the IDS for this information one sees "Potter Aderson & Corroon LLP, Suplemental opening Breif on Claims Construction, 3/3/2017". When looking for this document, it is not found within the submission of the IDS and therefore can not be specifically considered. However, under further envestegation, the Examiner has come across how the Courts have construde the limitation as found in the Litigation Search acompanied with this action. The courts have stated that the limitation "independently clocked", under BRI, is interpreted as "operating in accordance with their own respective clocks during synchronous playback.", see page 9-10. Furthermore, as closely interpreted by the Examiner under BRI, the interpretation of "independently clocked" could also be that the clocks of each device is run under the devices own power, (i.e., the master device does not run the other device's clocks, the master device merely sets a sync point).

"playback timing information"

As pointed out by the 3PR, there appear to be two specific contructions for this limitation. It is said that Sonos proposed a contructions for "playback timing information" of "information indicating when the audio information [content] is to be played back", (construction 1). D&M in the Concurrent Litigation was said to construde the claims under BRI to mean "a series of time values, associated with an audio work divided into blocks of information, each indicating when one of the clocks of audio information should be played by the device", (construction 2). It would appear that "construction 1" is the broadest of the two specifically stated. It is said that Figures 2- 4 depict playback timing information. Though these figures depict more than what is claimed, it is seen multiple times thoughtout the specification that the device "provide audio and playback timing information for the synchrony group to enable a master device and slave devices to play the audio program synchronously", (e.g., Col. 8, lines 61-66). As stated in column 11, lines 15 et seq., "FIG. 4, the audio and playback timing information is in the form of a series of frames, **with each frame having a time stamp**." Therefore, the BRI of "playback timing information" could merely be a type of time stamp.

A. Relevant Statutes – Claim Rejections

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.

Claim Rejections - 35 USC § 103

The following is a quotation of 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 of this title, 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.

B. Detailed Analysis of the Rejection

The Examiner will use the same shorthand notation as the Requester of "1:1-5" for Column 1, lines 1-5.

1. Claims **9, 10, 11, 12, and 19 are** rejected under **pre-AIA 35 U.S.C. 103(a)** as being unpatentable over U.S. **Blank in view of the Gray and in further view of Sonos APA**.

RE: Claim 9

A first playback device comprising: one or more processors; a network interface; and tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

Blank discloses a media synch player 110 that is a playback device, (e.g., ¶ 0029, "*In operation, the media synch players 110 each generate a content stream such as video or audiovisual data in synchrony at the behest of the live playback system control console 125. Synchronism is derived from the time server 120, facilitating orchestration of the content*

provided by the media synch players 110. The system control console 125 and the media synch players 110 are slaved to the time server 120. As such, the system control console 125 can transmit a start time t+d for the media synch players 110 to start providing content from media files 210 (FIG. 2), and the media synch players 110 are synchronized with respect to this start time." See also [0026], [0034], [0036]-[0041], [0044]-[0047], [0052]-[0059], [0065]-[0071], [0077]-[0093].

Gray discloses a management system 212 at [0036]-[Q037] that can receive audio data over the Internet for use with audio system 216, and that management system can be a playback device that is integral with audio system 216. A person of ordinary skill in the art would understand that management system 212 can be implemented as part of one or more media synch player 110.

A person of ordinary skill in the art. would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and would understand that they could be implemented in conjunction with commonplace PC functionality disclosed in the Handbook.

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information;

Blank discloses that recorded media that are distributed over a wide geographic area can be used for a multimedia presentation that requires synchronization of multiple displays at, (e.g., ¶ 0008). Blank discloses that live playback system control console 125 at ¶ 0054 that provides control signals to interface 220 of media synch players 110, and that these control signals can include commands to "play" and "get file." Thus, at least live playback system control console 125 is a "*network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN).*", (e.g., ¶ 0054, "*In the block 405, control signals from the control console 125 are received by the interface 220. In one embodiment, the control signals may comprise, for example, one of: play, pause, stop, seek to time, get file and show images.*"). Blank discloses that media files 210 can be stored at a media storage location for each media synch player 110, or that is shared by two or more media synch players 110 at ¶ 0037. Blank discloses that the disclosed system elements can be connected over a WAN or the Internet at [0023], Blank incorporates U.S. patent application Ser. No. 09/836,834 (Published Application No. 2002/0150053 to Gray et a., hereinafter "Gray") by reference at [0042] and [0045], Gray discloses communication of multimedia packets 304 from a multimedia source 301 to a multimedia sink 302 over heterogeneous networks 303, which inherently requires an address identifying a network location of audio information outside of a LAN for a multimedia sink 302 on a local area network 313. See, Gray at Fig. 1, ¶¶ 0053, **0059**, 0061).

Gray discloses at ¶¶ 0036 – 0037 that management system 212 can receive audio data over the Internet for use with audio system 216, and that management system can be a playback device that is integral with audio system 216. A person of ordinary skill in the art would

understand that management system 212 can be implemented as part of one or more media synch player 110.

A person of ordinary skill in the art would recognize that streaming audio content from a source outside of the LAN could be accomplished using software programs such as the Windows Media Player, as disclosed at [0037] of Blank. A person having ordinary skill in the art would thus understand that live playback system control console 125 can provide control information to a media synch player that comprises an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN, as disclosed in Gray. As such, a person having ordinary skill in the art would understand that audio data that is received over the Internet by the system of Gray can be stored as a media file 210 of a media synch player 110 of Blank. It was common as of the critical date of the '357 Patent (April 1, 2003) for users to obtain content over the Internet from sources outside of a user's LAN and to store that content on a personal computer or other playback device. Also See, e.g., the Handbook.

(ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and

Blank discloses clock module 212 of a media synch player 110 that can be slaved to another clocking system at ¶ 0038, Blank also discloses the use of a time server 120 at ¶ 0029 and ¶¶ 0044-0051. A person of ordinary skill in the art would recognize that the time server 120 could be located on a first media synch player 110, and could provide the master clock that is

used to provide the playback timing information, (e.g., MPEP 2144.04 V.B. "Making Integral" *In re Larson,* 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), i.e., the courts found that making one means integral with another means, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice."). In this instance, taking to computers and housing them in "one box" would be an "obvious engineering choice". Thusly, the time server 120 would then transmit clock information to a second media synch players 110, to allow it to acquire lock with a clock contained in time server 120. See ¶ 0048 of Blank.

As discussed below, the first media synch player 110 can obtain the audio information and provide it to the second media synch player 110 using Windows file sharing, and can then provide playback timing information by either 1) hosting live playback system control console 125 and transmitting a play command to the second media synch player 110, for "playback timing information" construction 1, or 2) add time stamps to the media data packets at the application layer that are used to control playback timing in accordance with the teachings of Gray, for "playback timing information" construction 2, Time information can also be transmitted from time server 120 to other media synch players 110 to cause them to "speed up or slow" down rendering of clocks 212 in the individual media synch players 110." See [0045] of Blank. Time information that causes other media synch players 110 to speed up or slow down meets the broadest reasonable interpretation of "playback timing information," because it is used to control playback timing.

A person having skill in the art would recognize that live playback system control console 125 can also be implemented on a media synch player 110 with time server 120, and can

be used to provide playback timing information to other media synch players 110 as disclosed at [0044] as a time stamp "t" and an indication of a delay "d" that is used to coordinate playback, which satisfies the broadest reasonable interpretation of "playback timing information," because it is used to control playback timing. Therefore, it would have been obvious to combine the devices stated in Blank because of similar reasons stated above and in MPEP 2144.04. Blank discloses the playback timing information associated with the audio information under construction 1, such as when a start time t+d is generated by a first playback device that is also used to implement system control console 125. See ¶ 0029.

Gray discloses the use of time stamps in multimedia packets at [0062] that are used to control the time that a multimedia packet is to be rendered at, and further discloses at [0069] that the application layer can "maintain the common time reckoning across the devices, calculate the appropriate time stamp, and/or include the time stamp in the multimedia packet." A person of ordinary skill in the art would recognize from this teaching that the application layer on the media synch player 110 that includes a time server 120 could include the time stamp into the multimedia packets of the audio data from media file 210 (that has been obtained from outside the LAN and stored in media file 210) and which is then provided to other media synch players 110 as "playback timing data" for synchronized playback, because that would allow the system of Blank to be implemented on as few as two different devices, and would eliminate the need for a separate time server 120. Gray discloses the playback timing information associated with the audio information under construction 2, such as when the application layer of a media synch player 110 inserts timestamps into frames of audio data, See ¶¶ 0016, 0087, 0089.

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can transmit audio information, playback timing information and clock information to another playback device for synchronous playback.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that it was known to transmit audio information and playback timing information associated with the audio information (for synchronous playback) and device clock information of the first playback device (using RFC 1305 or SNTP), via the network interface of the first playback device to a second playback device. See '357 Patent at 1:47 to 2:28 and the '768 Provisional at pages 1-2. It would be obvious to use the Sonos APA with the system of Blank, because both Blank and the Sonos APA are directed to networked audio devices that playback audio in synchrony, and the Sonos APA would eliminate the need for an additional device for time server 120, because it teaches that the timing functionality can be provided by a playback device.

(iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information,

Blank discloses that media synch players 110 play back the audio information in synchrony with each other by using the playback timing information associated with the audio information that is generated by live playback system control consoled 125 and the device clock

information of the first playback device (which is used to generate the NTP timing information) to play back the audio information. See ¶¶ [0009], [0010], [0022], [0024], [0025], [0029], [0041], [0043]-[0045], Each media synch player 110 uses the audio information and its own clock information and the playback timing information (the start time of Blank t+d under construction 1, or frame-specific time stamps of Gray under construction 2), but even if the claims are amended to positively recite the second playback device and to require the second playback device to use the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information. Blank or Blank and Gray disclose that also.

The management systems 212 of Gray can play back the audio information in synchrony with a second management system 212 by using the playback timing information associated with each frame of the audio information and the device clock information of the first playback device to play back the audio information, such as using an application synchronization process in conjunction with the management systems 212. See ¶¶ [0016], [0087], [0089].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other using the playback timing information and clock time information of the first playback device, as discussed above.

It is noted that this limitation does not require the second playback device to playback the audio information by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio

information. That limitation only applies to the first playback device, and as long as the second playback device is playing back the audio information in synchrony with the first playback device while the first playback device uses the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, then the claim limitation is satisfied. It is further noted that the only real information that is used to play the audio is the audio information and the playback timing information. The "device clock information" is not specifically utilized since all that is needed it that the synchrony uses the playback timing information **associated** with the audio information and the device clock information, i.e., “associated" is not the same as saying "using” the device clock information in actual playing of audio information.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that it was known to transmit audio information and playback timing information associated with the audio information (for synchronous playback) and device clock information of the first playback device (using RFC 1305 or SNTP), via the network interface of the first playback device to a second playback device. See ‘357 Patent at 1:47 to 2:28 and the ‘768 Provisional at pages 1-2. It would be obvious to use the Sonos APA with the system of Blank, because both Blank and the Sonos APA are directed to networked audio devices that playback audio in synchrony, and the Sonos APA would allow Blank to provide the timing functionality on one of the media synch players 110 instead of a dedicated time server 120, thus reducing the need for an additional device.

wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The prior art of Blank and Gray do not explicitly disclose this limitation.

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can remain independently clocked during synchronous playback, at least because PCs contain multiple clocks that can be independent.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that playback devices can remain independently clocked during synchronous playback of audio information, see '357 Patent at 2:21-27 ("*When an audio playback device converts the digital audio information from digital to analog form, it does so using a clock that provides timing information. Generally, the audio playback devices that are being developed have independent clocks, and, if they are not clocking at precisely the same rate, the audio playback provided by the various devices can get out of synchronization.*"). Thus, if the independent clocks of the audio playback devices are clocking at precisely the same rate by design, or if they are synchronized, then the audio playback provided by the various devices remains in synchronization. Furthermore, as closely interpreted by the Examiner under BRI, the interpretation of "independently clocked" could also be that the clocks of each device is run under the devices own power, (i.e., the master device does not run the other device's clocks, the master device merely sets a sync point). Therefore, Blank or Gray would start the synchronization process and the devices in the network would run the clock from the sync point as received from the master clock. Thus it would have been obvious to one of ordinary skill in the art to combine Sonos APA with Blank or Gray because Blank and Gray merely lacked the explanation of the well-known and understood notion of devices running their clocks

independent of each other as stated by Sonos APA. Furthermore, the problem of synchronization of the independently clocked devices of Sonos APA is seen to be remedied by Blank and Gray's ability to synchronize the devices on its network much like the '357 Patent.

RE: Claim 10

The first play back device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to: generate the playback timing information associated with the audio information; and

Blank discloses that the software generates the playback timing information associated with the audio information under construction 1, such as when a start time t+d is generated by a first playback device that is also used to implement system control console 125. See ¶ [0029] Gray discloses that the software generates the playback timing information associated with the audio information under construction 2, such as when the application layer of a media synch player 110 inserts timestamps into frames of audio data. See ¶¶ [0016], [0087], [0089]. A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs that use SMPTE or RFC 1305 to generate playback timing information associated with the audio information, under either construction 1 in the form of a "play" command or under construction 2 in the form of frame-specific playback timing information.

generate the device clock information of the first playback device.

Blank discloses that the media synch player 110 software causes the media synch player 110 to generate device clock information of the first playback device, such as by activating the Network Time Protocol module 15. See [0038], [0046]-[0048]. Blank discloses clock module 212 of a media synch player 110 that can be slaved to another clocking system at ¶ 0038, Blank also discloses the use of a time server 120 at ¶ 0029 and ¶¶ 0044-0051. Thusly, the time server 120 would then transmit clock information to a second media synch players 110, to allow it to acquire lock with a clock contained in time server 120. See ¶ 0048 of Blank. Also see rejection of claim 9 above.

RE: Claim 11

The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

Blank discloses at [0029] that the "*media synch players 110 each generate a content stream such as video or audiovisual data in synchrony at the behest of the live playback system control console 125. Synchronism is derived from the time server 120, facilitating orchestration of the content provided by the media synch players 110. The system control console 125 and the media synch players 110 are slaved to the time server 120. As such, the system control console 125 can transmit a start time t+d for the media synch players 110 to start providing content from media files 210 (FIG. 2), and the media synch players 110 are synchronized with respect to this start time*." The start time is control information that includes one or more instructions for the first playback device and the second playback device to playback audio information.

See also Blank at [0044] ("*In operation, a time stamp "t" is obtained by each device from the controller 125, which is synchronized with the time server 120. Also included with the time stamp t is a delay indication "d". In combination, these time related components instruct the media synch players 110 on when to render content, available from the media files 210. Essentially, each media synch player 110 will wait to render content until a particular time t+d, derived from the time stamp from the controller 125. As such, content from all of the media synch players 110 will be synchronized to the same moment in time—t+d —regardless of when the time synchronization was initiated* "), [0056] ("*In a block 410, the media synch players 110 respond to the control signals and provide appropriate output signals via the signal paths 112 to the displays 105. Such may comprise start of synchronized operation of the media synch players 110 and associated displays 105, switching from one media file 210 to another (e.g., get file followed by start), cease operation (e.g., stop), which may include initiation of a predetermined state such as a blank or black display 105, and the like*").

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other in response to a suitable playback command.

RE: Claim 12

The first device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

Blank discloses that media synch players 110 are members of a synchrony group that play back the audio information in synchrony with each other by using the playback timing information associated with the audio information that is generated by live playback system control consoled 125 and the device clock information of the first playback device (which is used to generate the NTP timing information) to play back the audio information. See ¶¶ [0009], [0010], [0022], [0024], [0025], [0029], [0041], [0043] - [0045].

The management systems 212 of Gray can play back the audio information in synchrony with a second management system 212 in a synchrony group by using the playback timing information associated with each frame of the audio information and the device clock information of the first playback device to play back the audio information, such as using an application synchronization process in conjunction with the management systems 212. See ¶¶ [0016], [0087], [0089].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other, which would make then members of a synchrony group.

transmit, to the network device, status information that comprises a status of the synchrony group.

Blank discloses that status information that comprises a status of the synchrony group can be displayed in Figures 6 & 7, which shows the status of players **Al, B1** and **Cl,** which are each playing the same audio source ("Fgn_Affair"). See ¶¶ [0064]-[0065].

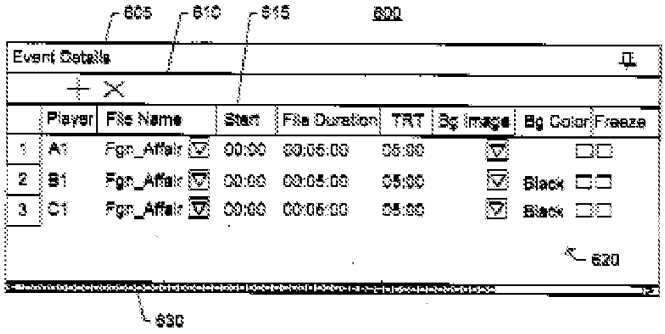


Fig. 6

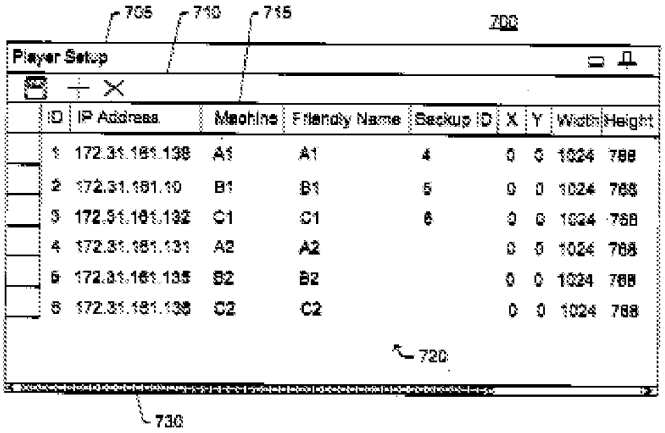


Fig. 7

Blank discloses that status information can be displayed using a player status mode [0070], and that the status information can include a status such as "playing" [0071], See Fig. 9, "player status," which is a "status of the synchrony group" because it is a status of a member of the synchrony group under the broadest reasonable construction of the term:

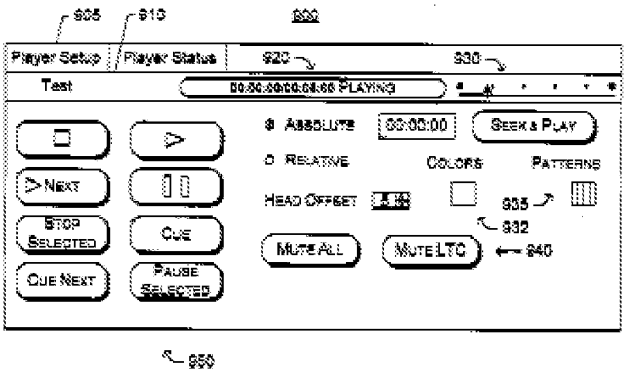


Fig. 9

To the extent that it is considered that Blank does not disclose this limitation, the Sonos APA discloses the existence of discovery protocols that can be used to learn about other components on the network and to establish communication with them, such as the Universal Plug and Play (UPnP) architecture, which defines discovery as the first step in UPnP networking. This allows devices to discover other devices and to exchange information about themselves and/or their services. See U.S. Provisional Application 60/490,768, filed July 28, 2003 (the '768 Provisional), A person of ordinary skill in the art would understand that such discovery protocols would result in the transmission of status information for each device in the synchrony group to a controller device, which could be implemented in conjunction with live playback system control console 125 or other suitable control devices.

RE: Claim 19

The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.

Blank discloses that the system elements can be connected by LANs, WANs or the Internet. See ¶ [0023].

Gray discloses that audio content can be obtained from a remote source over the Internet. See ¶¶ [0035]-[0037], [0041], [0046]-[0048].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs that can obtain audio information from an Internet-accessible source, as disclosed Blank, Gray, Sonos APA, or what is well known and ordinary in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the Handbook with for similar reasons stated above, herein and in the double patenting rejection.

IV. CONCLUSION

A. Submissions

1. Information Disclosure Statement (IDS)

The IDS submissions on 12/20/2017 has been considered. It is to be noted, however, that where patents, publications, and other such items of information are submitted by a party (patent owner or requester) in compliance with the requirements of the rules, the requisite degree of consideration to be given to such information will be limited by the degree to which the party filing the information citation has explained the content and relevance of the information. In instances, where no explanation of citations (items of information) is required and none is provided for an information citation, only a cursory review of that information is required. The examiner need only perform a cursory evaluation of each unexplained item of information, to the extent that he/she needs in order to determine whether he/she will evaluate the item further. If the cursory evaluation reveals the item not to be useful, the examiner may simply stop looking at it. This review may often take the form of considering the documents in the same manner as other documents in Office search files are considered by the Examiner while conducting a search of the prior art in a proper field of search. The initials of the Examiner, in this proceeding, placed adjacent to the citations on the PTO/SB/08A or its equivalent, without an indication in the record to the contrary in the record, do not signify that the information has been considered by the Examiner any further than to the extent noted above. The same degree of consideration was provided for the references merely cited with the request but for which no explanation regarding the content and relevance of the information was provided. See MPEP 609, Chapter 0600, pages 192-193 of pages 1-197 - MPEP Eighth Edition, Revision 8 (July 2010). The examiner notes that

due to the unusually large number of references cited, and the absence of any description of the relevance of the references, it should be assumed that only the most cursory review of the cited documents consistent with these guidelines has been performed. If applicant is aware of any information that might be of particular relevance, it should be pointed out in order to insure a higher degree consideration.

The responsibility of compliance with 37 CFR 1.555 rests on all such individuals. Any fraud practiced or attempted on the Office or any violation of the duty of disclosure through bad faith or intentional misconduct by any such individual results in noncompliance 37 CFR 1.555(a). This duty of disclosure is consistent with the duty placed on patent applicants by 37 CFR 1.56. Any such issues raised by the patent owner or the third party requester during a reexamination proceeding will merely be noted as unresolved questions under 37 CFR 1.552(c).

All such individuals who fail to comply with 37 CFR 1.555(a) do so at the risk of diminishing the quality and reliability of the reexamination certificate issuing from the proceeding.

See MPEP § 2282 (*ex parte* reexamination) and MPEP § 2686 (*inter partes* reexamination) for the patent owner's duty to disclose prior or concurrent proceedings in which the patent is or was involved. Patent Owner is advised to supply a copy of the pertinent areas of these references so they may be considered by the Examiner.

B. Extension of time

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings

"will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c). See MPEP § 2265.

C. Litigation Reminder

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving Patent No. 9,213,357 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

D. Amendment in Reexamination Proceedings

Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR'1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.530(d) - (j), and must contain any fees required by 37 CFR 1.20(c). See MPEP § 2234 and 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

E. Service of Papers

All correspondence related to this ExParte reexamination proceeding should be directed:

By EFS: Registered users may submit via the electronic filing system EFS-Web, at

https://efs.uspto.gov/efile/myportal/efs-registered

By Mail to: Mail Stop Ex Parte Reexam

Central Reexamination Unit

Commissioner for Patents

United States Patent & Trademark Office

P.O. Box 1450

Alexandria, VA 22313-1450

By FAX to: (571) 273-9900

Central Reexamination Unit

By hand: Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22314

Telephone numbers for reexamination inquiries:

Reexamination and Amendment practice: (571) 272-7703

Central Reexamination Unit (CRU): (571) 272-7705

Any inquiry concerning this communication or earlier communications from the examiner, or as to the status of this proceeding, should be directed to the Central Reexamination Unit at telephone number (571) 272-7705.

/David E. England/
Primary Examiner, Art Unit 3992

Conferees:

/Roland Foster/
Primary Examiner, Art Unit 3992

/MICHAEL FUELLING/
Supervisory Patent Examiner, Art Unit 3992

Office Action in Ex Parte Reexamination	Control No. 90/013,959	Patent Under Reexamination 9213357	
	Examiner DAVID ENGLAND	Art Unit 3992	AIA (First Inventor to File) Status No

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

a. ☒ Responsive to the communication(s) filed on *12/20/2017* .
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☒ This action is made FINAL.

c. ☐ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire *2* month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☒ Information Disclosure Statement, PTO/SB/08.
3. ☐ Interview Summary, PTO-474.
4. ☐ _____.

Part II SUMMARY OF ACTION

1a. ☒ Claims *9-12 and 19* are subject to reexamination.
1b. ☒ Claims *1-8,13-18 and 20* are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims *9-12,19* are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
   1 ☐ been received.
   2 ☐ not been received.
   3 ☐ been filed in Application No. _____ .
   4 ☐ been filed in reexamination Control No. _____.
   5 ☐ been received by the International Bureau in PCT application No. _____.
   * See the attached detailed Office action for a list of the certified copies not received.
9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate 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.
10. ☐ Other: _____

cc: Requester (if third party requester)

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

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

U.S.PATENTS						
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.						

U.S.PATENT APPLICATION PUBLICATIONS						
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.						

FOREIGN PATENT DOCUMENTS								
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								

NON-PATENT LITERATURE DOCUMENTS			
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. /D.E.E/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

	1	Order; Case 1:14-cv-01330-WCB; Document 471; Filed 11/30/17 (2 pages)	☐
	2	Letter in Response to Defendant's Letter; Case 1:14-cv-01330-WCB; Document 470; Filed 11/30/17 (1 page)	☐
	3	Defendant's Letter with Exhibits Redacted; Case 1:14-cv-01330-WCB; Filed 11/30/17 (17 pages)	☐
	4	Jury Verdict; Case 1:14-cv-01330-WCB; Document 528; Filed 12/15/17 (6 pages)	☐

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

EXAMINER SIGNATURE

Examiner Signature	/DAVID E ENGLAND/	Date Considered	02/23/2018

*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. /D.E.E/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)		
	Application Number	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

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	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2017-12-20
Name/Print	Jeffrey P. Armstrong	Registration Number	54,967

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. /D.E.E/

Reexamination	**Application/Control No.** 90013959	**Applicant(s)/Patent Under Reexamination** 9213357
	Certificate Date	**Certificate Number**

Requester Correspondence Address: ☐ **Patent Owner** ☒ **Third Party**
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	02/26/2018 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., United States District Court		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	90013959	9213357
	Examiner	Art Unit
	DAVID ENGLAND	3992

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
searched prior art from IDS	7/17/17	/DE/
reviewed IDS	10/18/2017	/DE/
Reviewed IDS and prior art	2/23/2018	/DE/

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 01/05/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
01/05/2018	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patents and Trademark Office
P.O.Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS

MR. CHRISTOPHER JOHN ROURK
JACKSON WALKER LLP
2323 ROSS AVENUE, SUITE 600
DALLAS, TX 75201

Date: 01/05/2018

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. : 90013959
PATENT NO. : 9213357
ART UNIT : 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Decision Expunging/Returning Papers in Reexamination	**Control No.: 90/013,959**

1. ☒ THIS IS A DECISION EXPUNGING THE PAPERS FILED January 3, 2018 by Third Party Requester from the record of the reexamination proceeding(s). Since each expunged paper does not form part of the record, it is being expunged by marking it "closed" and "not public" in the Office's Image File Wrapper (IFW) system.
   ☐ THIS IS A DECISION RETURNING/DESTROYING THE PAPER(S) FILED _____ by_____.

2. The papers being ☒ expunged ☐ returned ☐ destroyed are**:**

   Third Party Requester's 01/03/2018 submission entitled "Information Disclosure Statement" including: 1) 6 page Information Disclosure Statement transmittal letter, 2) pages 311-315 from the trial transcript of in Case No. 1:14-cv-1330-WCB dated December 12, 2017, 3) Two page email from Sonos, Inc. dated December 14, 2017, 4.) One page email from Joshua R. Stein, Law Clark to Honorable William C. Bryson dated December 14, 2017, and 5.) four page Information Disclosure Statement - form PTO SB08a.

   This decision will be made of record in the reexamination file(s).

3. THE ABOVE-IDENTIFIED PAPERS LACK A RIGHT OF ENTRY BECAUSE:

   A. ☐ Patent Owner may not file papers in the record prior to the order granting/denying reexamination (*ex parte*) or first action (*inter partes*). 37 CFR §§1.530(a) and 1.939(b).

   B. ☒ Third party requester in an *ex parte* reexamination may not file papers in the reexamination file subsequent to the request, except a reply to a proper patent owner statement under 37 CFR 1.530 *or a notice of concurrent proceedings as described in MPEP 2282*. See 37 CFR §§1.535 and 1.550(g).

   C. ☐ Third party requester in an *inter partes* reexamination may not file papers in the record, except as specified in the rules, 37 CFR §§1.947, 1.951(b) and 1.983, and 37 CFR §§ 41.61-79, other than a notice of concurrent proceedings as described in MPEP 2686. See 37 CFR1.939.

   D. ☐ Parties other than patent owner and a third party requester may not file documents in the record except a notice of concurrent proceedings. See 37 CFR §§1.550(h) and 1.939(a).

   E. ☒ **To the extent Third Party Requester views this submission as a submission pursuant to 37 CFR 1.565, the notice of concurrent proceedings under 37 CFR 1.565 exceeds the permitted scope. See MPEP 2282.**

   F. ☒ Other: Third Party Requester's 01/03/2018 submission entitled "Information Disclosure Statement" and the included documents identified above, exceeds the scope of the submissions permitted by MPEP 2282 and 37 CFR 1.565(a). While MPEP 2282 permits a Third Party Requester in an *ex parte* reexamination to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the patent undergoing reexamination, pursuant to 37 CFR 1.565(a), that notification is limited to providing "**bare notice**". The submissions may not include arguments or information which provide a party's arguments. (See MPEP 2282). The 1/3/2018 submission by Third Party Requester of an "Information Disclosure Statement" and accompanying documents is not limited to simply apprising the Office of litigation activity, or other prior or concurrent proceedings, involving the patent undergoing reexamination because the submission includes more than bare notice of related litigation activity and provides third party requester arguments related to patentability. Thus, this submission by Third Party Requester does not comply with MPEP 2282 and 37 CFR 1.565(a). Accordingly, all of Third Party Requester's documents submitted as part of the "information disclosure statement filed 1/3/2018 have been expunged from the record.

4. CONCLUSION
   Telephone inquiries with regard to this decision should be directed to Michael Fuelling at 571-270-1367, in the Central Reexamination Unit.

   /Michael Fuelling/ SPE, Central Reexamination Unit

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 01/05/2018

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
01/05/2018	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patents and Trademark Office
P.O.Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS

MR. CHRISTOPHER JOHN ROURK
JACKSON WALKER LLP
2323 ROSS AVENUE, SUITE 600
DALLAS, TX 75201

Date: 01/05/2018

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. : 90013959
PATENT NO. : 9213357
ART UNIT : 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Decision Expunging/Returning Papers in Reexamination	**Control No.: 90/013,959**

1. ☒ THIS IS A DECISION EXPUNGING THE PAPERS FILED December 1, 2017 by Third Party Requester from the record of the reexamination proceeding(s). Since each expunged paper does not form part of the record, it is being expunged by marking it "closed" and "not public" in the Office's Image File Wrapper (IFW) system.
   ☐ THIS IS A DECISION RETURNING/DESTROYING THE PAPER(S) FILED _____ by_____.

2. The papers being ☒ expunged ☐ returned ☐ destroyed are**:**

   Third Party Requester's 12/01/2017 submission entitled "Information Disclosure Statement" including: 1) 2 page Information Disclosure Statement transmittal letter dated December 1, 2017, 2) two page Order regarding D&M Holding's request to reopen claim construction in 1:14-cv-1330-WCB 311-315, 3) one page letter to Judge William C. Bryson from Counsel from Phillip Rovner, dated November 30, 2017, 4.) 4 page redacted letter with 13 page attachment from Jack Blumenfeld to Judge William C. Bryson dated November 30, 2017 and 5.) four page Information Disclosure Statement - form PTO SB08a.

   This decision will be made of record in the reexamination file(s).

3. THE ABOVE-IDENTIFIED PAPERS LACK A RIGHT OF ENTRY BECAUSE:

   A. ☐ Patent Owner may not file papers in the record prior to the order granting/denying reexamination (*ex parte*) or first action (*inter partes*). 37 CFR §§1.530(a) and 1.939(b).

   B. ☒ Third party requester in an *ex parte* reexamination may not file papers in the reexamination file subsequent to the request, except a reply to a proper patent owner statement under 37 CFR 1.530 *or a notice of concurrent proceedings as described in MPEP 2282*. See 37 CFR §§1.535 and 1.550(g).

   C. ☐ Third party requester in an *inter partes* reexamination may not file papers in the record, except as specified in the rules, 37 CFR §§1.947, 1.951(b) and 1.983, and 37 CFR §§ 41.61-79, other than a notice of concurrent proceedings as described in MPEP 2686. See 37 CFR1.939.

   D. ☐ Parties other than patent owner and a third party requester may not file documents in the record except a notice of concurrent proceedings. See 37 CFR §§1.550(h) and 1.939(a).

   E. ☒ **To the extent Third Party Requester views this submission as a submission pursuant to 37 CFR 1.565, the notice of concurrent proceedings under 37 CFR 1.565 exceeds the permitted scope. See MPEP 2282.**

   F. ☒ Other: Third Party Requester's 12/01/2017 submission entitled "Information Disclosure Statement" and the included documents identified above, exceeds the scope of the submissions permitted by MPEP 2282 and 37 CFR 1.565(a). While MPEP 2282 permits a Third Party Requester in an *ex parte* reexamination to appraise the Office of any litigation activity, or other prior or concurrent proceeding, involving the patent undergoing reexamination, pursuant to 37 CFR 1.565(a), that notification is limited to providing "**bare notice**". The submissions may not include arguments or information which provide a party's arguments. (See MPEP 2282). The 12/1/2017 submission by Third Party Requester of an "Information Disclosure Statement" and accompanying documents are not limited to simply appraising the Office of litigation activity, or other prior or concurrent proceedings, involving the patent undergoing reexamination because the submission includes more than bare notice of related litigation activity and provides third party requester arguments related to patentability. Thus, this submission by Third Party Requester does not comply with MPEP 2282 and 37 CFR 1.565(a). Accordingly, all of Third Party Requester's documents submitted as part of the "information disclosure statement" filed 12/1/2017 have been expunged from the record.

4. CONCLUSION
   Telephone inquiries with regard to this decision should be directed to Michael Fuelling at 571-270-1367, in the Central Reexamination Unit.

   /Michael Fuelling/ SPE, Central Reexamination Unit

Application Number	Application/Control No.	Applicant(s)/Patent under Reexamination	
	90/013,959	9213357	

Document Code - DISQ	Internal Document – DO NOT MAIL

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed : 12/20/2017	**This patent is subject to a Terminal Disclaimer**	

Approved/Disapproved by:

Patricia Volpe, Paralegal Specialist

Patent Number: 9,195,258

U.S. Patent and Trademark Office

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO THE NON-FINAL OFFICE ACTION MAILED OCTOBER 20, 2017

Please consider the following Remarks submitted in response to the Non-Final Office Action mailed on October 20, 2017, in the above-captioned reexamination.

A listing of the **PENDING CLAIMS** begin on page 2.

REMARKS begin on page 7.

Patentee authorizes the Office to charge any underpayment or credit any overpayment of fees in connection with the above-captioned reexamination to Deposit Account 13-2490.

CLAIMS

1. (Original) A method comprising:

receiving, by a first playback device from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information (i) obtaining, by the first playback device from the audio information source outside of the LAN, the audio information; (ii) transmitting, by the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) playing back, by the first playback device, the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

2. (Original) The method of claim 1, further comprising:

after receiving the control information, additionally (i) generating, by the first playback device, the playback timing information associated with the audio information; and (ii) generating, by the first playback device, the device clock information of the first playback device.

3. (Original) The method of claim 1, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

4. (Original) The method of claim 3, wherein the first and second playback devices are members of a synchrony group, and wherein the method further comprises:

transmitting, by the first playback device to the network device, status information that comprises a status of the synchrony group.

5. (Original) The method of claim 4, wherein the status information further comprises an identification of each playback device in the synchrony group.

6. (Original) The method of claim 5, wherein the status information further comprises an identification of a master playback device of the synchrony group.

7. (Original) The method of claim 6, wherein the first playback device is the master playback device of the synchrony group.

8. (Original) A tangible non-transitory computer-readable medium having instructions stored thereon that, when executed, cause a first playback device to:

receive, from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, from the audio information source outside of the LAN, the audio information; (ii) transmit, to a second playback device, the audio

information, playback timing information associated with the audio information, and clock time information for the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the clock time information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

9. (Original) A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play

back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

10. (Original) The first playback device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

generate the playback timing information associated with the audio information; and

generate the device clock information of the first playback device.

11. (Original) The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

12. (Original) The first playback device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

transmit, to the network device, status information that comprises a status of the synchrony group.

13. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of each playback device in the synchrony group.

14. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of a master playback device of the synchrony group.

15. (Original) The first playback device of claim 14, wherein the first playback device is the master playback device of the synchrony group.

16. (Original) The first playback device of claim 12, wherein the status information further comprises an identification of one or more slave playback devices in the synchrony group, and wherein the second playback device is one of the one or more slave playback devices in the synchrony group.

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

generate a plurality of frames, wherein an individual frame comprises at least a portion of the audio information and the playback timing information associated with the audio information, and wherein the first playback device transmitting to the second playback device the audio information, playback timing information, and device clock information of the first playback device comprises transmitting the plurality of frames to the second playback device.

18. (Original) The first playback device of claim 9, wherein the audio information comprises one of audio files or packetized streaming audio information.

19. (Original) The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.

20. (Original) The first playback device of claim 9, wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises sending, to the audio information source, a request for the audio information.

REMARKS

I. Status of the Claims

Claims 9-12 and 19 of U.S. Pat. 9,213,357 (Millington '357) are subject to reexamination, of which claim 9 is independent. Claims 1-8, 13-18, and 20 are not subject to reexamination. Patentee has not amended the claims.

II. Summary of the Non-Final Office Action

In the Non-Final Office Action, the Office: (i) rejected claim 9 on the ground of nonstatutory double patenting based on claim 11 of U.S. Pat. 9,195,258 (Millington '258), *The MP3 and Internet Audio Handbook* (Handbook), and alleged Sonos admitted prior art (APA); (ii) rejected claims 9-12, and 19 under 35 U.S.C. § 103 based on U.S. Pat. 6,611,537 (Edens) and Handbook; (iii) rejected claims 9-12 and 19 under 35 U.S.C. § 103 based on U.S. Pub. 2004/0252400 (Blank), U.S. Pub. 2002/0150053 (Gray), and alleged APA.

III. Summary of the Claimed Features

The subject matter of Millington '357 was invented during the development of Sonos's revolutionary multi-zone home audio system when the inventor, Nicholas Millington, recognized that it is "desirable to maintain synchrony of operations among a plurality of independently-clocked digital data processing devices in relation to, for example, information that is provided thereto by a common source." Millington '357, 1:48-51. For example, in systems where audio information relating to the same audio program is provided to two or more independently-clocked audio playback devices (also referred to as "zone players") that are distributed in different rooms of a residence, an office, or the like, it is desirable for the audio playback devices to play back the same audio in synchrony. Millington '357, 1:51-2:11; Wolfe Dec., ¶ 22.

However, Millington recognized that playing back the same audio on multiple independently-clocked audio playback devices in synchrony presents several challenges.

One challenge is that "[s]mall differences in the audio playback devices' start times and/or playback speeds can be perceived by a listener as an echo effect, and larger differences can be very annoying." Millington '357, 2:12-14. Millington recognized that these "[d]ifferences can arise because [of] a number of reasons, including delays in the transfer of audio information over the network," and further, that "[s]uch delays can differ as among the various audio playback devices for a variety of reasons, including where they are connected into the network, message traffic and other reasons." Millington '357, 2:15-19. Thus, there is a level of precision required for playing back audio in synchrony that may not be required for other types of operations.

Another challenge is that "[w]hen an audio playback device converts the digital audio information from digital to analog form, it does so using a clock that provides timing information," and "[g]enerally, the audio playback devices that are being developed have independent clocks." Millington '357, 2:21-28. In operation, such independently-clocked playback devices cannot be expected to "clock[] at precisely the same rate." Millington '357, 2:25-26; Wolfe Dec., ¶ 26. And as a result, such independently-clocked playback devices could not play back audio in synchrony. Millington '357, 2:26-28; Wolfe Dec. ¶ 26.

To overcome these challenges, Millington developed "a new and improved system and method for synchronizing operations among a number of digital data processing devices that are regulated by independent clocking devices," such as "audio playback devices that receive digital audio information that is to be played back in synchrony." Millington '357, 2:32-40. For instance, Millington's invention is directed to a "network audio system" in which a first playback

device is programmed with the capability to, *inter alia*, "(i) obtain…audio information; (ii) transmit…the audio information, playback timing information associated with the audio information, and device clock information of the first playback device [to a second playback device]; and (iii) play back…the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information." Millington '357, 38:27-43. This invention thus enables the playback devices in the networked audio system to "reproduce audio information synchronously, notwithstanding the fact that packets, which may contain digital audio information, transmitted over the network to the various [playback devices] connected thereto may have differing delays and the [playback devices] operate with independent clocks." Millington '357, 31:30-36.

IV. Response to the Double Patenting Rejections

Patentee disagrees that claims 9-12 and 19 are unpatentable over claim 11 of Millington '258. Nevertheless, without conceding the merits of the rejection, and solely to advance prosecution, Patentee has submitted a terminal disclaimer relative to Millington '258, and Patentee requests that the Office withdraw the double patenting rejections in view of the terminal disclaimer.

V. Response to the § 103 Rejections

Patentee submits that the claims are patentable over the cited references and requests that the Office withdraw the § 103 rejections.

A. Claims 9-12 and 19 are Patentable over Edens, Handbook, and the alleged APA

In contrast to the claims, Edens discloses playback devices configured in "a synchronous logical ring network." Edens, 9:58. Because Edens relies on its synchronous network architecture to ensure synchronous playback of audio content among multiple playback devices, Edens solves the problem of synchronous playback among multiple playback devices in an entirely different manner than claim 9 of Millington '357. Wolfe Dec., ¶ 27. And because Edens solves the problem of synchronous playback among multiple playback devices using a synchronous logical ring network architecture that is different from the solution recited in claim 9, Edens fails to teach or suggest all the elements recited in claim 9, and indeed, Edens teaches away from solutions that do not implement synchronous transmission schemes. Wolfe Dec., ¶¶ 27-28 and 36-37. Further, the addition of Handbook and the alleged APA fails to overcome the deficiencies of Edens. Wolfe Dec., ¶¶ 23-26.

More particularly, and as explained below, claims 9-12 and 19 are patentable over Edens, Handbook, and the alleged APA for at least the reason that Edens, Handbook, and the alleged APA, individually or in combination, fail to teach or suggest a first playback device configured to (i) "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information…"; (ii) "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information"; and (iii) "wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information," in combination with the other elements recited in the claims.

i. Edens, Handbook, and the alleged APA fail to teach or suggest a first playback device configured to "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information"

At a minimum, Edens does not teach or suggest a first playback device configured to "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information," in combination with the other elements recited in the claims. Further, the addition of Handbook and the alleged APA fails to overcome this deficiency of Edens.

In Edens's synchronous logical ring network, "***fixed frames*** of information propagat[e] around the network at ***consistent time intervals*** (44.1kHz 'frame rates' in one embodiment, to enable device synchronization to the CD audio sample rate)." Edens, 10:12-15 (emphasis added). Because of the strictly-enforced frame size and frame transmission rate of Edens's synchronous ring network, "information is ***guaranteed*** to propagate from any device to any other device within one CD audio sample time." Edens, 27:40-45 (emphasis added). "In other words, information will propagate consistently around the logical ring network at the frame rate; and the time required for information to propagate between any two particular devices will remain fixed." Edens, 10:18-21. Importantly, "all network devices are guaranteed to receive any given 44.1kHz audio sample ***before any network device receives the next such sample***." Edens, 31:11-13 (emphasis added).

Because Edens guarantees that every playback device receives the same sample at the same sample time, and because for an ordered series of audio samples, all the playback devices are guaranteed to receive a current sample before any playback device receives a next sample in the ordered series, Edens does not need to have one playback device "transmit[]…***playback timing information*** associated with the audio information…" to other playback devices in the

system. Wolfe, Dec., ¶¶ 27-28. Instead, each playback device in Edens simply plays each received audio sample immediately upon receipt because the synchronous ring network architecture "***ensur[es]*** phase coherency among devices" so that "left and right speakers are ***guaranteed*** to be 'synchronized' to the same audio sample time while playing stereo audio generated by a CD player." Edens, 27:40-45 (emphasis added); Edens, 31:42-44 ("each speaker still would play its audio [] stream '***immediately'*** upon receiving it via the logical ring network") (emphasis added); Wolfe Dec., ¶ 28.

The Office Action contends, "Edens uses frames of data that include the 'frame header,' which is playback timing information that is used to synchronize digital media streams such as CD audio or MPEG (audio information)." Office Action, pp. 12-13 (emphasis original). But the frame header in Edens does not amount to "playback timing information" under either (1) the District Court's construction of "information indicating when the audio information [content] is to be played back" or (2) the Office's broader proposed construction of "merely a type of time stamp." Wolfe Dec., ¶¶ 29-32. This is because the "frame header" neither indicates ***when*** audio information ***is to be played back*** as required under the District Court's construction nor includes any type of time information as required under the Office's proposed construction.[1] Wolfe Dec., ¶¶ 29-32.

Instead, Edens explains that "the 'frame header' (which actually comprises 2 symbols), is used to synchronize all other devices to the network clock device" at the frame rate. Edens, 27:1-14. In operation, "the frame header occupies the first two nibbles (0 and 1) of the 128 nibbles in each frame." Edens, 30:19-21. Importantly, the frame header in Edens is not a time

[1] Patentee disagrees with the Office's construction of "playback timing information" to the extent that it permits for ***any*** type of time stamp. The term "playback timing information" itself makes clear that such information must be used to schedule ***playback*** of the "associated…audio information". Allowing "playback timing information" to read on ***any*** type of time stamp would read the word "playback" and the phrase "associated with the audio information" out of this claim term, which is improper.

stamp, it is not "associated with" any particular "audio information," and it certainly does not indicate ***when*** audio information ***is to be played back***. Wolfe Dec., ¶¶ 29-32. Instead, each frame header is one of two alternative patterns, neither of which encodes ***any*** timing information – let alone "playback timing information" as that term is used in the claims of the '357 Patent. Wolfe Dec., ¶ 32; Edens, 68:60-63 ("Frame header detection logic 2500 recognizes the unique pattern of the two possible frame header symbol pairs, JK ('1100010001') and WK ('0100010001'), transmitted at a 44.1 kHz rate...").

Moreover, to the extent the Office contends that "playback timing information" in the claims "could merely be a type of time stamp," Office Action, p. 5, Edens ***teaches away*** from asynchronous solutions that require the generation and use of timestamps when transmitting audio data between playback devices. Wolfe Dec., ¶¶ 33-34; MPEP 2141.02 (VI) (prior art must be considered in its entirety, including disclosures that teach away from the claims). For example, Edens explains that, when "data packets are transmitted asynchronously, devices must be able to buffer incoming packets and generate timing information internally (i.e., 'timestamps' associated with the data packets), which must be communicated to other devices." Edens, 6:40-45; Wolfe Dec. ¶¶ 33-34. Edens expressly disparages the use of timestamps in connection with transmitting media between playback devices, because such implementations require "almost double the audio data…due to this buffering/timestamping process, resulting in a significant loss of bandwidth." Edens, 6:45-47; Wolfe Dec. ¶¶ 33-34. Edens further discourages the use of timestamps in this context because such an approach requires "expensive devices, due to the memory, buffers, counters and associated circuitry" for generating and processing those timestamps. Edens, 6:47-49; Wolfe Dec. ¶¶ 33-34. Thus, not only does Edens fail to disclose the use of "playback timing information" to achieve synchronous playback, Edens also teaches

away from using timestamps when asynchronously transmitting audio data between playback devices. Wolfe Dec. ¶¶ 33-34.

Because the "frame header" in Edens is merely a bit pattern and neither encodes time data associated with audio information (i.e., it is not a time stamp) nor indicates when audio information is to be played back, the "frame header" in Edens does not amount to "playback timing information associated with the audio information" as proposed in the Office Action. Wolfe Dec., ¶¶ 27-32. Thus, Edens does not teach or suggest a first playback device configured to "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information," as recited in the claims. Indeed, Edens has no reason to transmit the recited "playback timing information associated with the audio content" and even teaches away from using "playback timing information associated with the audio content" for synchronous playback, because the synchronous ring network architecture guarantees that each playback device receives the same audio sample at the same sample time, thereby enabling each playback device to play a received audio sample immediately upon receipt without reference to "playback timing information associated with the audio content." Wolfe Dec., ¶¶ 27-34.

The addition of Handbook and the alleged APA does not overcome this deficiency of Edens because, like Edens, Handbook and the alleged APA also fail to teach or suggest a first playback device configured to "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information." Indeed, the Office Action does not cite Handbook or the alleged APA for teaching this aspect of the claims. Office Action, pp. 12-14. Further, Patentee's review of Handbook and the alleged

APA found no teaching or suggestion of this claim element in combination with the other elements recited in the claims.

Accordingly, the combination of Edens, Handbook, and the alleged APA fails to teach or suggest a first playback device that is configured to "transmit, via the network interface of the first playback device to a second playback device…playback timing information associated with the audio information," in combination with the other elements recited in the claims. Therefore, claims 9-12 and 19 are patentable over Edens, Handbook, and the alleged APA for at least this independent reason.

ii. Edens, Handbook, and the alleged APA fail to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information."

Edens fails to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information" for at least the reason that Edens, Handbook, and the alleged APA fail to teach or suggest "playback timing information associated with the audio information" in the first instance, as described above.

Because Edens, Handbook, and the alleged APA fail to teach or suggest "playback timing information associated with the audio information" in the first instance, Edens, Handbook, and the alleged APA cannot possibly teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback

timing information associated with the audio information…," in combination with the other elements recited in the claims. Therefore, claims 9-12 and 19 are patentable over Edens, Handbook, and the alleged APA for at least this additional independent reason.

iii. Edens, Handbook, and the alleged APA fail to teach or suggest "wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information."

On November 30, 2017, and contrary to 37 CFR 1.550 and MPEP 2254, the third-party requester filed an Information Disclosure Statement enclosing a letter the third-party requester sent to the District Court in the related litigation accusing Sonos of advocating for a different meaning of the term "independently clocked" during the present *ex parte* reexamination than the position that Sonos took during the related litigation. Because under 37 CFR 1.550, "active participation of the ex parte reexamination requester ends with the reply pursuant to § 1.535, and no further submissions on behalf of the reexamination requester will be acknowledged or considered," Patentee is uncertain as to how the Office will treat the third party requester's improper submission. Therefore, Patentee has submitted herewith an Information Disclosure Statement that includes the materials submitted in the third party requester's improperly-filed submission to ensure that the record is complete.

Contrary to the accusation in the third-party requester's misleading letter to the District Court, Sonos has not taken conflicting positions on the meaning of the "independently clocked" claim term.[2] As explained during the November 16, 2017, interview and confirmed again here,

[2] Indeed, as Sonos explained to the District Court, the architecture disclosed in Edens is completely different from the independently-clocked HEOS players accused of infringement in the related litigation. Specifically, as explained during the interview and herein, Edens is directed to playback devices in a specialized "***synchronous*** logical ring network." On the other hand, the accused HEOS players are interconnected via an ***asynchronous*** network and each operate in accordance with their own respective clocks. While the third-party requester has tried to equate the functionality of having one independently-clocked HEOS player in the asynchronous network attempt to mirror the frequency of another independently-clocked HEOS player in the asynchronous network with Edens's "synchronous

Patentee agrees with the construction of the "independently clocked" term adopted by the District Court in the related litigation. But as explained during the interview, regardless of whether the District Court's construction or the Office's proposed broadest reasonable interpretation applies, the claims are still patentable over Edens, Handbook, and the alleged APA for the independent reasons explained above.

Nevertheless, and further to the technical distinctions set forth above, the playback devices in Edens do not "remain independently clocked during synchronous playback" in combination with the other elements recited in the claim in same way as the playback devices disclosed and described in Millington '357 for at least the reason that the playback devices in Edens are configured to use synchronous transmission protocols to transmit information in "a synchronous logical ring network" architecture. Edens, 9:58-61; Wolfe Dec., ¶ 35. Because of the underlying network architecture of Edens's synchronous logical ring network, the playback devices in the synchronous logical ring network are very different from the playback devices in Millington '357, and thus, the playback devices in Edens do not remain independently clocked during synchronous playback of media content like the playback devices recited in the claims. Wolfe Dec., ¶ 35. Thus, Edens fails to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the

---

logical ring network," these are distinctly different types of systems that achieve different results, as the District Court recognized in denying the third-party requester's request to reopen claim construction. Thus, the Patentee's argument here that the playback devices in Edens's "synchronous logical ring network" are not "independently clocked" has no relevance to the Patentee's argument in the related litigation that the accused HEOS Players "remain independently clocked during synchronous playback," which has been adopted both by the District Court and also the jury in the related litigation.

audio information," in combination with the other elements recited in the claims for at least this additional reason.

The addition of Handbook and the alleged APA does not overcome this deficiency of Edens. Indeed, contrary to the assertions in the Office Action, it would not have been obvious to modify the "synchronous logical ring network" of Edens with the teachings of the alleged APA so that the playback devices in Edens "remain independently clocked" during synchronous playback for at least the reasons that (i) the alleged APA nowhere states that independently clocked playback devices could play content in synchrony and (ii) Edens teaches away from network devices configured for operation on asynchronous networks like the recited playback devices.

First, the alleged APA states, "[t]iming information can be distributed to various network connected devices using network time protocols such as Network Time Protocol (NTP) and Simple Network Time Protocol" but that "these protocols, however, only provide a distribution mechanism for timing information; they do not provide the algorithms to synchronize playback using such timing information." Prov. App. 60/490,768, ¶ 4; Wolfe Dec., ¶ 23. The alleged APA further explains that "[g]enerally, the audio playback devices that are being developed have independent clocks, and, if they are not clocking at precisely the same rate, the audio playback provided by the various devices can get out of synchronization." Millington '357, 2:24-28. Contrary to the suggestion in the Office Action, independently-clocked playback devices did not reliably clock at precisely the same rate. Wolfe Dec., ¶ 26. And as a result, independently-clocked playback devices could not be expected to play back audio in synchrony. Wolfe Dec., ¶ 26. So even if the "synchronous logical ring network" of Edens were modified with the teachings of the alleged APA as suggested in the Office Action, the proposed combination still

would not teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information," in combination with the other claim elements. Wolfe Dec., ¶¶ 23-26.

Second, Edens teaches away from network devices that do not use synchronous transmission protocols. Wolfe Dec., ¶ 36. A reference teaches away from a claimed invention "when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken" in the claim. *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013); MPEP 2141.02(VI).

Here, Edens says, "[a]pplying local area network technology (e.g., Ethernet and TCP/IP network protocols) to consumer electronics devices ***raises a number of problems***" and that "[a]lthough it appears advantageous to connect consumer electronics devices as generic nodes on a network, ***existing network protocols are far from optimized for real-time streams of digital audio and video***." Edens, 4:47-53 (emphasis added); Wolfe Dec., ¶ 36. Edens further explains that "Ethernet…is not optimized to carry real-time continuous digital media streams" because "[i]t is an asynchronous, packet-based protocol that would add significant overhead to digital audio and video samples, which require consistent and timely delivery, as opposed to the ability to 'burst' packets of information at high speeds on demand." Edens, 5:4-10; Wolfe Dec., ¶ 36. Edens teaches that playback devices that use Ethernet and/or other asynchronous transmission protocols rather than synchronous transmission protocols to distribute real-time media would be

undesirably "complex and expensive devices, due to the memory, buffers, counters and associated circuitry required" for real-time digital media. Edens, 6:38-52; Wolfe Dec., ¶ 36.

By distinguishing the "synchronous logical ring network" from alternatives that do not rely upon synchronous transmission and explicitly disparaging alternatives that "cannot guarantee consistent delivery of data such as real-time continuous digital media streams," Edens, 9:12-14, Edens teaches away from playback devices like those recited in the claims that do not rely on synchronous transmission protocols, but rather solve the problem of synchronizing audio playback between independently-clocked playback devices in a local area network by having one playback device transmit "playback timing information associated with the audio information" and "device clock information" to another playback device. Wolfe Dec., ¶ 37.

Because Edens expressly disparages solutions that do not implement a synchronous logical ring network, persons of skill in the art at the time of the invention would not have been motivated to modify the synchronous logical ring network nodes in Edens to perform the playback device functions recited in the claims. MPEP 2141.02(VI).

B. Claims 9-12 and 19 are Patentable over Blank, Gray, and the alleged APA

The § 103 rejections of claims 9-12 and 19 based on Blank, Gray, and the alleged APA should be withdrawn for at least the reasons that (i) the combination of Blank, Gray, and the alleged APA does not teach or suggest all the elements recited in the claims; (ii) the proposed modification and combination of Blank and Gray is based on improper hindsight reasoning that uses Patentee's claims as a roadmap; and (iii) a person of skill in the art at the time of the invention would not have been motivated to modify and combine the disparate devices in Blank and Gray and then configure those devices to perform the functions recited in the claims as proposed in the Office Action.

i. Blank, Gray, and the alleged APA fail to teach or suggest all the elements recited in the claims

At a minimum, the combination of Blank, Gray, and the alleged APA fails to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information," in combination with the other elements recited in the claims.

The Office Action contends that the proposed combination of Blank and Gray teaches "playing back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information" because (i) "[e]ach media synch player 110 uses the audio information and its own clock information and the playback timing information (the start time of Blank t+d)" or (ii) each media synch player 110 uses the audio information and its own clock information and the "frame-specific time stamps of Gray." Office Action, p. 33.

Contrary to the first assertion in the Office Action, Blank does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on playback timing information that the first media synch player also sends to another media synch player. Wolfe Dec., ¶ 40. Even assuming for the sake of argument that a person of skill in the art at the time of the invention could have combined Blank's media synch player 110 and control console 125 as proposed in the Office Action, there is no teaching or suggestion in Blank as to how such a combined device would (or even could) use the t+d information that the proposed

combined device would send to a second media synch player 110 for synchronous playback with the second media synch player 110. Wolfe Dec., ¶ 41.

Further, contrary to the second assertion in the Office Action, neither Blank nor Gray disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on a "frame-specific time stamp" that the first media synch player also sends to another media synch player. Wolfe Dec., ¶¶ 42, 47. And even assuming for the sake of argument that a person of skill in the art at the time of the invention could have modified Blank's media synch player 110 to use Gray's "frame-specific time stamps," neither Gray nor Blank suggest using time stamps for synchronous playback between multiple playback devices. Wolfe Dec., ¶¶ 43, 48.

The addition of the alleged APA does not overcome the deficiencies of Blank and Gray because the alleged APA also does not teach or suggest synchronous playback. The Office Action contends that Blank and Gray could be modified to use RFC 1305 (NTP) and SNTP based on the alleged APA's disclosure of those protocols. Office Action, p. 33. But neither RFC 1305 (NTP) nor SNTP relate to playing back media content, much less playing back media content in synchrony among multiple playback devices. Wolfe Dec., ¶ 24. Instead, both NTP and SNTP merely address ***clock synchronization*** between computing devices rather than ***synchronous playback of media content*** among multiple playback devices. Wolfe Dec., ¶ 24. These are different concepts, and clock synchronization alone is not sufficient to achieve synchronous playback of media content in a networked audio system. Wolfe Dec., ¶ 25. Indeed, the alleged APA expressly states, "[t]iming information can be distributed to various network connected devices using network time protocols such as Network Time Protocol (NTP) and Simple Network Time Protocol" but that "these protocols, however, only provide a distribution

mechanism for timing information; they do not provide the algorithms to synchronize playback using such timing information." Prov. App. 60/490,768, ¶ 4; Wolfe Dec., ¶ 23.

In view of the foregoing, Blank, Gray, and the alleged APA fail to teach or suggest a first playback device configured to "play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information," in combination with the other elements recited in the claims." Therefore, claims 9-12 and 19 are patentable over Blank, Gray, and the alleged APA for at least this independent reason.

ii. The proposed modification and combination of Blank and Gray is based on hindsight reasoning that uses Patentee's claims as a roadmap

The Office Action contends that a person of skill in the art could have modified and then combined various devices in Blank and Gray to practice the claimed invention, and that it would have been obvious for a person of skill in the art to do so. Office Action, pp. 30-35. Patentee respectfully disagrees.

As an initial matter, Patentee disagrees that Blank and/or Gray could be modified in the manner proposed in the Office Action or that Blank and Gray teach or suggest the claim elements for which they are cited. Nevertheless, the fact that the prior art ***could*** be modified is not sufficient to support the legal conclusion that a person of skill in the art ***would*** in fact have been motivated to do so. *InTouch Technologies v. VGO Communications, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) (reversing a finding of obviousness that was based on "conclusory references to [the expert's] belief that one of ordinary skill in the art ***could*** combine these references, not that they ***would*** have been motivated to do so.") (emphasis original); *ActiveVideo*

Networks, Inc. v. Verizon Communications, Inc., 694 F.3d 1312 (Fed. Cir. 2012); *Ex Parte Hongwei Kong*, PTAB, 2013-009261 (Decided Oct. 22, 2015), p. 3 (reversing Examiner's § 103 rejection and "conclud[ing] the Examiner [had] pieced together individual elements from the prior art using only [applicant's] disclosure and claim as a roadmap, an exercise in impermissible hindsight."). "A reason for combining disparate prior art references is a critical component of an obviousness analysis" and "should be made explicit." *InTouch*, 751 F.3d at 1351 (quotations omitted).

For example, the Federal Circuit in *InTouch* reversed a district court's judgment of obviousness because, even assuming the prior art disclosed all the claim elements, "there [was] insufficient evidence…of a reason or motivation…to combine [the prior art references]" to arrive at the claimed invention. 751 F.3d at 1351. The patent challenger's expert (i) cited a first reference describing "what happens when you have multiple robots and you want to control them from different stations" and a second reference showing "doing things over the Internet," (ii) reasoned that "robots are going over the Internet too; so that applies to them as well," and (iii) opined that "one of ordinary skill in the art could combine these references." *Id.* at 1351. Because the expert's "testimony primarily consisted of conclusory references to her belief that one of ordinary skill in art ***could*** combine these references, not they ***would*** have been motivated to do so," the Federal Circuit concluded that, absent any evidence that a person of skill in the art would have been motivated to combine the references, "[i]t appears that [the expert] relied on the [challenged patent] itself as a roadmap" for her obviousness opinion, and thus, the patent challenger's expert "succumbed to hindsight bias in her obviousness analysis." *Id.* at 1351-52 (emphasis original).

Similarly, the Federal Circuit in *ActiveVideo* affirmed a district court's judgement of nonobviousness even though the prior art disclosed all the claim limitations because there was no motivation to combine the elements of the prior art in the manner recited in the claims. 694 F.3d at 1327-29. The patent challenger's expert explained that, (i) in the prior art, "[t]hese are all components that are modular, and when I add one, it doesn't change the way the other one works," (ii) modifying and combining the prior art "would yield a predictable result," and (iii) "[t]he motivation to combine would be because you wanted to build something better,…more efficient, cheaper, or you wanted a system that had more features, makes it more attractive to your customers, because by combining [features of the prior art] you could do something new…." *Id.* at 1328. Nevertheless, the Federal Circuit affirmed the district court's judgment of nonobviousness in part because the "expert testimony regarding the motivation to combine references…fail[ed] to explain why a person of ordinary skill in the art ***would*** have combined elements from specific references in the way the claimed invention does" and thus, the expert's proffered motivation to modify and combine the teachings of the prior art was "fraught with hindsight bias." *Id.* at 1328-29 (emphasis added) (citing *KSR v. Teleflex*, 550 U.S. 398, 418 (2007)).

The Federal Circuit's reasoning in *InTouch* and *ActiveVideo* is equally applicable here where, similar to the expert opinions in *InTouch* and *ActiveVideo* that the Federal Circuit found insufficient to support the legal conclusion of obviousness, the Office Action contends only that numerous modifications ***could*** be made. Indeed, the Office Action contends that no less than ***six*** proposed modifications to the teachings of the cited references ***could*** theoretically be made—without providing any explanation as to why those modifications ***would*** have been made—including specifically:

1. "the time server 120 [in Blank] ***could*** be located on a first media synch player 110 [in Blank], and ***could*** provide the master clock that is used to provide the playback timing information," Office Action, pp. 30-31 (emphasis added);
2. Blank's "control console 125 ***can*** also be implemented on [Blank's] media synch player 110 with [Blank's] time server 120, and ***can*** be used to provide playback timing information to other media synch players 110," Office Action, p. 31;
3. assuming Blank's media synch player 110 was modified to distribute audio content and timing to other media synch players as suggested above, a "media synch player 110 [in Blank] that includes a time server 120 [in Blank] ***could*** include the time stamp [taught in Gray] into the multimedia packets of the audio data from media file 210," Office Action, pp. 31-32 (emphasis added);
4. "the media synch players 110 of Blank or the management system 212 of Gray…***could*** be implemented as PCs or in conjunction with PCs, and which ***can*** transmit audio information, playback timing information and clock information to another playback device for synchronous playback," Office Action, p. 32 (emphasis added);
5. "the first media synch player 110 ***can*** obtain the audio information and provide it to the second media synch player 110 using Windows file sharing, and ***can*** then provide playback timing information by either 1)…transmitting a play command… or 2) add time stamps to the media data packets…in accordance with the teachings of Gray," Office Action, p. 31 (emphasis added); and
6. "the media synch players 110 of Blank or the management system 212 [component of home entertainment system 210] of Gray…***could*** be implemented

as PCs or in conjunction with PCs, and which ***can*** remain independently clocked during synchronous playback, at least because PCs contain multiple clocks that ***can*** be independent." Office Action, p. 35 (emphasis added).

As in *InTouch* and *ActiveVideo*, even if Blank and Gray ***could*** be modified and combined in the complex manner proposed in the Office Action to create a hypothetical consolidated device that performs all the features recited in the claims, that alone is not sufficient to support the conclusion that a person of skill in the art ***would*** have been motivated to do so. Here, at best, the Office Action "has alleged that some of the elements were in the prior art and some of the other elements, while not present in the prior art, could have been performed by prior art devices if they were used in a way that was not described by the prior art references," and thus, "[i]t strains credulity to suggest that a person of skill in the art would have read [the prior art references] and arrived at the claimed feature without impermissibly using the claims as a roadmap." *Ex Parte Hongwei Kong*, PTAB, 2013-009261 at 3 (reversing Examiner's § 103 rejection and "conclud[ing] the Examiner [had] pieced together individual elements from the prior art using only [applicant's] disclosure and claim as a roadmap, an exercise in impermissible hindsight."). Like the expert testimony in *InTouch* and *ActiveVideo*, the Office Action fails to explain why a person of ordinary skill in the art ***would*** have combined and modified the disparate elements of Blank and Gray to create a hypothetical consolidated device to practice the claimed invention. And similar to *InTouch, ActiveVideo*, and *Ex Parte Hongwei Kong*, absent any evidence that a person of skill in the art at the time of the invention would have been motivated to modify and combine Blank and Gray to create the hypothetical consolidated device proposed in the Office Action, Applicant's own claim language is the only apparent basis in the record for the proposed combinations and modifications, and thus, the § 103 rejection is an exercise in

hindsight bias and should be withdrawn. *InTouch*, 751 F.3d at 1351-52; *Active Video*, 694 F.3d at 1327-29; *Ex Parte Hongwei Kong*, PTAB, 2013-009261 at 3.

iii. A person of skill in the art would not have any reason to modify and combine the disparate devices in Blank and Gray and then configure those devices to perform the functions recited in the claims as proposed in the Office Action.

As described above, the Office Action contends that a person of skill in the art at the time of the invention could have created a hypothetical consolidated device by, *inter alia*, (i) combining the functions of Blank's media synch player 110, Blank's time server 120, Blank's control console 125, Gray's multimedia source 301, Gray's multimedia sink 302, and Gray's network gateway 331 into a single, consolidated device, (ii) using Gray's "frame-specific time stamps" for synchronizing playback among the proposed consolidated devices in the manner recited in the claims, and/or (iii) using a network of PCs to implement all the capabilities recited in the claims. Office Action, pp. 30-35. But contrary to the assertions in the Office Action, a person of ordinary skill in the art at the time of the invention would not have been motivated to combine the functions of the components in Blank and Gray and then further configure those modified devices in the proposed hypothetical consolidated device to perform the functions recited in the claims.

Blank is a local area network solution comprising a system for synchronizing playback of audio and video content (A/V content) via multiple displays 105 (each connected to a media synch player 100) over a bus 115 or other local network where "there is a need to maintain synchronization" between "multiple audio-visual displays…to provide a large audience with access to a particular presentation" and where un-synchronized playback among the multiple displays 105 would cause "perceptual discordance of the presentation" that would "undesirably detract from intelligibility and audience appreciation of the content being presented." Blank, ¶ 6,

Fig. 1; Wolfe Dec., ¶ 38. Although Blank mentions that "other types of interconnections are also possible, including fiber optic communications, LANs, WANs or the Internet or any other data network," Blank, ¶ 23, a person of skill in the art would not have been motivated to synchronize playback of A/V content among two displays connected by a wide area network (WAN) in the context of the system disclosed in Blank, because if two displays were sufficiently far enough apart to warrant connection via a WAN, then no viewer could see the first and second displays at the same time and thus, no viewer would experience "perceptual discordance of the presentation" solved by Blank's disclosed system if the second display did not play the A/V content in synchrony with the first display. Wolfe Dec., ¶ 39.

Blank's system includes (i) multiple "media synch players 110," where each media synch player stores the A/V content in local storage 210 for playback via a display 105; (ii) a "time server 120" to which each device in Blank's system is synchronized; and (iii) a system controller 125 that instructs the media synch players 110 when to start/stop playback of the A/V content to its display 105 from its local storage 210 by sending a time stamp "t" (synced with the time server 120) and a delay "d" to each media synch player 110. Blank, Figs. 1, 2, ¶¶ 10, 22, 29, 37, 43-44.

In contrast to Blank, Gray is a WAN solution comprising a system for transmitting "real-time" AV content from a media source 301 (e.g., an Internet media content provider) to a media sink 302 (e.g., home entertainment system 210) over a path that traverses multiple heterogeneous networks comprising two or more of a (i) constant delay network 311, (ii) variable delay network 312 with a common time base 322, and/or (iii) a variable delay network without a common time base 313. Gray, Figs. 2-3, ¶¶ 13, 53-57; Wolfe Dec., ¶ 44.

To deliver the "real-time" AV content from the media source 301 to the media sink 302 over multiple networks within "the minimal jitter tolerances required to support real-time presentation of the multimedia data" at the media sink 302 (i.e., to avoid "choppy" or "stuttering" playback), Gray deploys gateways 331 "between each network in the heterogeneous networks" to emulate a constant delay network over the multiple heterogeneous networks. Gray, ¶¶ 6, 59, Fig. 6; Wolfe Dec., ¶ 45.

In operation, each gateway interprets (and when appropriate, modifies) time stamps in each multimedia packet, and then forwards each multimedia packet to the next heterogeneous network based on the time stamps to "provide for the delivery of multimedia packets regardless of the heterogenic nature of the networks that intervene between the multimedia source and the multimedia sink" so that "streaming multimedia data may be available regardless of the location of the user," thereby "represent[ing] a significant improvement over the state of the art." Gray, ¶¶ 63-70; Wolfe Dec., ¶ 46.

a. There is no motivation to combine the functions of Blank's media synch player, time server, and control console into the hypothetical consolidated device as proposed in the Office Action.

Nothing in Blank suggests that combining Blank's media synch player, control console, and time server into a single, hypothetical consolidated device would be at all desirable. Wolfe Dec., ¶ 49-50. On the other hand, there are technical, economic, and operational reasons ***not*** to combine the functionalities of the media synch player, control console, and time server into a single, hypothetical consolidated device as proposed in the Office Action. Wolfe Dec., ¶¶ 51-56.

For example, each such hypothetical consolidated device would be both more complex to design and more expensive to manufacture than a media synch player alone because of the additional components and programming required for the hypothetical consolidated device to

perform the time server and control console functions. Wolfe Dec., ¶ 52. Further, because each display requires a media synch player function, the additional system cost of using the hypothetical consolidated devices at each display compared to media synch players would increase linearly as the number of displays in the system increased. Wolfe Dec., ¶ 53. And from an operational standpoint, incorporating the control console functionality in each hypothetical consolidated device as proposed would require the system operator controlling the system to either (i) use a dedicated hypothetical consolidated device for controlling the system, but only use the control console functionality, which would be inefficient, or (ii) control the system from one of the hypothetical consolidated devices that is also playing content via a display, which would be cumbersome. Wolfe Dec., ¶¶ 54-55. Additionally, if every hypothetical consolidated device had the ability to transmit and receive audio content, playback timing information, and device clock information to/from any other hypothetical consolidated device, then configuration and operation of a network of such hypothetical consolidated devices would be far more complex than Blank's disclosed solution where each of the media synch player 110, control console 125, and time server 120 devices performs its own specialized role in the network. Wolfe Dec., ¶ 56.

In view of the technical, economic, and operational drawbacks, a person of ordinary skill in the art at the time of the invention would not have been motivated to combine Blank's media synch player, control console, and time server into the hypothetical consolidated device proposed in the Office Action.

b. There is no motivation to modify the system in Blank to use the time stamps in Gray for synchronous media playback as proposed in the Office Action.

Further, a person of skill in the art at the time of the invention would not have been motivated to modify the system in Blank to use the time stamps in Gray for synchronizing

playback among multiple playback devices as proposed in the Office Action because Blank ***already solves*** the problem of synchronous playback among multiple playback devices, albeit in a different way than what is recited in the claims. Wolfe Dec., ¶ 57.

"[A] person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to [a second reference] to solve a problem already solved by [a first reference].") *In re Rinkevich*, BPAI, 2007-1317 (Decided May 29, 2007), p. 9.

In *Rinkevich*, an examiner rejected claims under § 103 based on two cited references and argued that "an artisan would have been motivated to modify [the first reference] with the teachings of [the second reference]" because "[the second reference] resolves the problem presented by [the first reference], i.e., how to avoid the need to log off an existing user account prior to logging on to a new user account." BPAI, 2007-1317, p. 5. However, when analyzing the two cited references, the Board observed that the first reference taught "a Microsoft Windows super-user (SU) utility that allows a system administrator to temporarily start applications running in the security context on a different account without having to first close all open applications and log off." *Id.* at 9. Therefore, the Board reasoned, "the problem proffered by the Examiner is already solved by [the first reference]." *Id.* at 9. As a result, the Board concluded that "a person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to [the second reference] to solve a problem already solved by [the first reference]." *Id.* at 9. And absent any evidence that a person of skill in art would have been motivated to combine the first and second references as proposed by the Examiner, the Board further concluded, "the Examiner [had] impermissibly used the instant claims as a guide or roadmap in formulating the rejection." *Id.* at 9.

Here, consistent with the Board's reasoning in *Rinkevich*, a person of skill in the art at the time of the invention would not have been motivated to modify the system in Blank to use the time stamps in Gray for synchronizing playback among multiple playback devices as proposed in the Office Action because Blank already solves the problem of synchronous playback among multiple playback devices. In particular, Blank discloses a solution for coordinating synchronous playback among multiple media synch players 110, where the control console 125 sends a time stamp "t" synced with the time server 120 and a delay "d" to each media synch player 110 so that "all of the media synch players 110 will be synchronized to the same moment in time -- t+d -- regardless of when the time synchronization was initiated." Blank, ¶ 44; Wolfe Dec., ¶ 84. Even though Blank's disclosed solution for synchronizing media playback among devices is different than the solution recited in the claims, Blank nevertheless has a solution for coordinating synchronous playback among multiple media synch players, and thus, "a person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to [Gray] to solve a problem already solved by [Blank]." *Rinkevich*, BPAI, 2007-1317 at 9.

Moreover, nothing in Blank or Gray suggests that the time stamps in Gray's WAN solution for emulating a constant delay network over multiple heterogeneous networks could be used in Blank's LAN solution to facilitate synchronous playback among multiple devices as proposed in the Office Action. Gray, ¶¶ 6, 59, Fig. 6; Wolfe Dec., ¶ 58. Indeed, nothing in either Blank or Gray suggests that Gray's time stamps for emulating a constant delay network over multiple heterogeneous networks in a WAN context would be useful for coordinating synchronous playback among multiple devices in a LAN context, much less how a person of skill in the art could go about using Gray's time stamps as "playback timing information

associated with…audio information" in combination with "audio information" and "device clock information" to facilitate synchronous playback among multiple playback devices in the manner recited in the claims. Wolfe Dec., ¶¶ 58-59.

Because a person of ordinary skill in the art having common sense at the time of the invention would not have reasonably looked to Gray to solve a problem already solved by Blank, a person of skill in the art at the time of the invention would not have been motivated to combine the teachings of Blank and Gray as proposed in the Office Action. *Rinkevich*, BPAI, 2007-1317 at 9.

VI. Conclusions

In view of the foregoing, and without conceding the merits of any of the assertions in the Request for *Ex Parte* Reexamination or Office Action not explicitly addressed herein, Patentee respectfully submits that the claims are in condition for confirmation, and Patentee respectfully requests that the Office issue a reexamination certificate confirming the patentability of all the claims. If further dialog would advance prosecution, the Office is invited to telephone the undersigned at 312-913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: December 20, 2017

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

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF ANDREW WOLFE, PH.D.

1. I have been asked by the Patentee, Sonos, Inc., in the above-captioned *Ex Parte* Reexamination to opine on certain aspects of the technical references cited in the Non-Final Office Action mailed on October 20, 2017.

2. I have more than 30 years of experience as a computer architect, computer system designer, personal computer graphics designer, educator, and executive in the electronics industry. As detailed record of my professional qualifications is attached as Exhibit 1 to this Report and summarized below.

3. In 1985, I earned a B.S.E.E. degree in Electrical Engineering and Computer Science from The Johns Hopkins University. In 1987, I received an M.S. degree in Electrical and Computer Engineering from Carnegie Mellon University. In 1992, I received a Ph.D. in Computer Engineering from Carnegie Mellon University. My doctoral dissertation proposed a new approach for the architecture of a computer processor.

4. In 1983, I began designing touch sensors, microprocessor-based computer systems, and I/O (input/output) cards for personal computers as a senior design engineer for Touch Technology, Inc. During the course of my design projects with Touch Technology, I designed I/O cards for PC-compatible computer systems, including the IBM PC-AT, to interface with interactive touch-based computer terminals that I designed for use in public information systems. I continued designing and developing related technology as a consultant to the Carroll Touch division of AMP, Inc., where in 1986 I designed one of the first custom touchscreen integrated circuits.

5. From 1986 through 1987, I designed and built a high-performance computer system as a student at Carnegie Mellon University. From 1986 through early 1988, I also developed the curriculum, and supervised the teaching laboratory, for processor design courses.

6. In the latter part of 1989, I worked as a senior design engineer for ESL-TRW Advanced Technology Division. While at ESL-TRW, I designed and built a bus interface and memory controller for a workstation-based computer system, and also worked on the design of a multiprocessor system.

7. At the end of 1989, I (along with some partners) reacquired the rights to the technology I had developed at Touch Technology and at AMP, and founded The Graphics Technology Company. Over the next seven years, as an officer and a consultant for The Graphics Technology Company, I managed the company's engineering development activities and personally developed dozens of touch screen sensors, controllers, and interactive touch-based computer systems.

8. I have consulted, formally and informally, for a number of fabless semiconductor companies. In particular, I have served on the technical advisory boards for two processor

design companies: BOPS, Inc., where I chaired the board, and Siroyan Ltd., where I served in a similar role for three networking chip companies—Intellon, Inc., Comsilica, Inc, and Entridia, Inc.—and one 3D game accelerator company, Ageia, Inc.

9. I have also served as a technology advisor to Motorola and to several venture capital funds in the U.S. and Europe. Currently, I am a director of Turtle Beach Corporation, providing guidance in its development of premium audio peripheral devices for a variety of commercial electronic products, including speakers.

10. From 1991 through 1997, I served on the Faculty of Princeton University as an Assistant Professor of Electrical Engineering. At Princeton, I taught undergraduate and graduate-level courses in Computer Architecture, Advanced Computer Architecture, Display Technology, and Microprocessor Systems, and conducted sponsored research in the area of computer systems and related topics. I was also a principal investigator for DOD research in video technology and a principal investigator for the New Jersey Center for Multimedia Research. From 1999 through 2002, I taught the Computer Architecture course to both undergraduate and graduate students at Stanford University multiple times as a Consulting Professor. At Princeton, I received several teaching awards, both from students and from the School of Engineering. I have also taught advanced microprocessor architecture to industry professionals in IEEE and ACM sponsored seminars. I am currently a lecturer at Santa Clara University teaching courses on Computer Organization and Architecture and Mechatronics.

11. From 1997 through 2002, I held a variety of executive positions at a publicly-held fabless semiconductor company originally called S3, Inc. and later called Sonicblue Inc. I held the positions of Chief Technology Officer, Vice President of Systems Integration Products, Senior Vice President of Business Development, and Director of Technology, among others. At

the time I joined S3, the company supplied graphics accelerators for more than 50% of the PCs sold in the United States.

12. Beginning in 1998, I began to work closely with S3's largest customer, Diamond Multimedia, to explore possible opportunities for a merger. My investigation included evaluating the technology, market, and business model related to the "Diamond Rio PMP300," the first commercially-viable flash-memory MP3 player. In 1999, I led the merger negotiations between the two companies, managed significant parts of company integration, and, after the merger was complete, worked on new product development. Soon after the merger with Diamond Multimedia, I helped introduce the "Diamond Rio PMP500," a portable music player that included USB capability and also the ability to play downloaded files purchased from the Audible.com website. I also helped develop relationships with MP3 music vendors, including eMusic and MP3.com.

13. While at Diamond Multimedia, I also helped develop the Rio 600 and 800 MP3 players, which included support for digital rights management ("DRM") protected music, using protocols from Microsoft. I also helped to develop the Rio Receiver (also sold by Dell), the first successful digital music streaming client device. I also helped develop the Rio Audio Center, a digital music server and receiver. During the development of the PMP500 and the Rio 600, I also helped develop a music delivery platform and webstore backend service for selling DRM-protected music. In 1999, this business segment was spun out as a separate company called RioPort.com. I served on the RioPort.com board of directors and became involved in their product and technology strategy. For example, I was involved in RioPort.com becoming the provider of the backend services for what was known at the time as the BestBuy.com music store and the MTV.com music store. I also worked with Microsoft and various music studios in

developing strategies, business models, and technologies for DRM-protected music delivery. Further, I worked with a company established by Sony Music Entertainment and Universal Music Group, initially called "Duet," that was created to deliver online music subscriptions to users. While working on Duet, we developed a technology and business model using Microsoft's DRM solution that allowed monthly subscribers to download as much music as they wanted to a Rio 600 and play the downloaded music offline. This subscription download service launched as the "Pressplay" music service and was later renamed "Napster." I also managed engineering and marketing for the Rio product line for a period of time as an interim general manager. I was also an investor in Rioport.com.

14. I served as a board member and technical advisor at KBGear Inc. from 1999-2001. KBGear Inc. designed and produced digital cameras and music players.

15. I have published more than 50 peer-reviewed papers in computer architecture and computer systems and IC design.

16. I also have chaired IEEE and ACM conferences in microarchitecture and integrated circuit design and served as an associate editor for IEEE and ACM journals.

17. I am a named inventor on at least 53 U.S. patents and 30 foreign patents including patents on networked digital media.

18. In 2002, I was the invited keynote speaker at the ACM/IEEE International Symposium on Microarchitecture and at the International Conference on Multimedia. From 1990 through 2005, I have also been an invited speaker on various aspects of technology and the PC industry at numerous industry events including the Intel Developer's Forum, Microsoft Windows Hardware Engineering Conference, Microprocessor Forum, Embedded Systems Conference, Comdex, and Consumer Electronics Show, as well as at the Harvard Business

School and the University of Illinois Law School. I have been interviewed on subjects related to computer graphics and video technology and the electronics industry by publications such as the Wall Street Journal, New York Times, Los Angeles Times, Time, Newsweek, Forbes, and Fortune as well as CNN, NPR, and the BBC. I have also spoken at dozens of universities including MIT, Stanford, University of Texas, Carnegie Mellon, UCLA, University of Michigan, Rice, and Duke.

19. I have reviewed and considered the specification, claims, and prosecution history of the U.S. Pat. 9,213,357 (Millington '357) under reexamination.

20. I have reviewed and considered the Office Action mailed on October 20, 2017.

21. I have also reviewed and considered the following references cited in the Non-Final Office Action mailed on October 20, 2017:

a. *The MP3 and Internet Audio Handbook* (Handbook);

b. The alleged Sonos admitted prior art (APA);

c. U.S. Pat. 6,611,537 (Edens);

d. U.S. Pub. 2004/0252400 (Blank); and

e. U.S. Pub. 2002/0150053 (Gray).

The Millington '357 Patent

22. In systems where audio information relating to the same audio program is provided to two or more independently-clocked audio playback devices (also referred to as "zone players") that are distributed in different rooms of a residence, an office, or the like, there are circumstances when it is desirable for the audio playback devices to play back the same audio in synchrony. Millington '357, 1:51-2:11.

23. When Sonos was developing synchronous playback technology in 2004, "[t]iming information [could] be distributed to various network connected devices using network time protocols such as Network Time Protocol (NTP) and Simple Network Time Protocol" (SNTP), but "these protocols, however, only provide[d] a distribution mechanism for timing information; they [did] not provide the algorithms to synchronize playback using such timing information." Prov. App. 60/490,768, ¶ 4.

24. NTP and SNTP merely address clock synchronization between computing devices rather than synchronous playback of media content among multiple playback devices; they do not relate to playing back media content, much less playing back media content in synchrony among multiple playback devices.

25. Clock synchronization is different from synchronous playback of media among multiple playback devices; clock synchronization alone is not sufficient to achieve synchronous playback of media content in a networked audio system.

26. When Sonos developed its synchronous playback technology in 2004, independently-clocked playback devices did not reliably clock at precisely the same rate, and as a result, independently-clocked playback devices could not be expected to play back audio in synchrony.

Edens

27. Edens solves the problem of synchronous playback among multiple playback devices in an entirely different manner than claim 9 of Millington '357. In particular, Edens relies on the tightly-controlled synchronous transmission protocol in the synchronous logical ring network architecture to facilitate synchronous playback of audio content among multiple

playback devices configured to transmit and receive data according to Edens's synchronous transmission protocol.

28. Edens does not need to have one playback device "transmit[]...playback timing information associated with the audio information..." to other playback devices in the synchronous logical ring network because (i) the synchronous transmission protocol guarantees that every playback device receives the same sample at the same sample time, and (ii) for an ordered series of audio samples, the synchronous transmission protocol guarantees that all the playback devices in the synchronous logical ring network receive a current sample before any playback device in the synchronous logical ring network receives a next sample in the ordered series. See, e.g., Edens, 10:12-15; 10:18-21; 27:40-45; 31:11-13; and 31:42-44.

29. The frame header in Edens is not "associated with" any particular "audio information."

30. The frame header in Edens does not indicate when audio information is to be played back.

31. The frame header in Edens does not include any type of time information, let alone time information that is used for synchronous playback.

32. Instead, each frame header is one of two alternative patterns, neither of which encodes ***any*** timing information – let alone "playback timing information" as that term is used in the claims of the '357 Patent.

33. Edens teaches away from using time stamps in connection with transmitting media content between playback devices by explaining that:

a. when "data packets are transmitted asynchronously, devices must be able to buffer incoming packets and generate timing information

internally (i.e., 'timestamps' associated with the data packets), which must be communicated to other devices," Edens, Edens, 6:40-45;

b. networks that use time stamps for transmitting media content between devices require "almost double the audio data...due to this buffering/timestamping process, resulting in a significant loss of bandwidth" as compared to networks that implement synchronous transmission protocols, Edens, 6:45-47; and

c. using time stamps for media playback requires "expensive devices, due to the memory, buffers, counters and associated circuitry" for generating and processing time stamps as compared to networks that implement synchronous transmission protocols, Edens, 6:47-49.

34. Because Edens teaches away from using time stamps for transmitting media content between playback devices, Edens teaches away from using time stamps for transmitting media content in a system where playback devices are configured for synchronous playback of media transmitted between playback devices.

35. The playback devices in Edens do not "remain independently clocked during synchronous playback" in combination with the other elements recited in the claims in the same way as the playback devices disclosed and described in Millington '357 because the playback devices in Edens are configured to use synchronous transmission protocols to transmit information in "a synchronous logical ring network" architecture. Edens, 9:58-61.

36. Edens teaches away from network devices that do not use synchronous transmission protocols by explaining that:

a. "[a]pplying local area network technology (e.g., Ethernet and TCP/IP network protocols) to consumer electronics devices raises a number of problems" and that "[a]lthough it appears advantageous to connect consumer electronics devices as generic nodes on a network, existing network protocols are far from optimized for real-time streams of digital audio and video," Edens, 4:47-53;

b. "Ethernet...is not optimized to carry real-time continuous digital media streams" because "[i]t is an asynchronous, packet-based protocol that would add significant overhead to digital audio and video samples, which require consistent and timely delivery, as opposed to the ability to 'burst' packets of information at high speeds on demand," Edens, 5:4-10; and

c. Ethernet and/or other asynchronous transmission protocols rather than synchronous transmission protocols to distribute real-time media would be too "complex and expensive devices, due to the memory, buffers, counters and associated circuitry required" to perform synchronous playback of real-time media distributed via asynchronous networks, Edens, 6:38-52.

37. By distinguishing the "synchronous logical ring network" from alternatives that do not rely upon synchronous transmission and explicitly disparaging alternatives that "cannot guarantee consistent delivery of data such as real-time continuous digital media streams," Edens, 9:12-14, Edens teaches away from playback devices like those recited in the claims that do not rely on synchronous transmission protocols, but rather solve the problem of synchronizing audio

playback between independently-clocked playback devices by having one playback device transmit "playback timing information associated with the audio information" and "device clock information" to another playback device.

Blank

38. Blank is a local area network solution comprising a system for synchronizing playback of audio and video content (A/V content) via multiple displays 105 (each connected to a media synch player 100) over a bus 115 or other local network where "there is a need to maintain synchronization" between "multiple audio-visual displays…to provide a large audience with access to a particular presentation" and where un-synchronized playback among the multiple displays 105 would cause "perceptual discordance of the presentation" that would "undesirably detract from intelligibility and audience appreciation of the content being presented." Blank, ¶ 6, Fig. 1.

39. Blank mentions that "other types of interconnections are also possible, including fiber optic communications, LANs, WANs or the Internet or any other data network," Blank, ¶ 23, but there is no need to synchronize playback of A/V content among two displays connected by a wide area network (WAN) in the context of the system disclosed in Blank, because if two displays are sufficiently far enough apart to warrant connection via a WAN, then no viewer could see the first and second displays at the same time and thus, no viewer would experience "perceptual discordance of the presentation" solved by Blank's disclosed system if the second display did not play the A/V content in synchrony with the first displayed.

40. Blank does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on playback timing information that the first media synch player also sends to another media synch player.

41. There is no teaching or suggestion in Blank as to how such a combined device like the one proposed in the Office Action would (or even could) use the t+d information that the proposed combined device would send to a second media synch player 110 for synchronous playback with the second media synch player 110.

42. Blank does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on a "frame-specific time stamp" that the first media synch player also sends to another media synch player.

43. Blank does not disclose using a "frame-specific time stamp" for synchronizing playback among multiple playback devices.

Gray

44. Gray is a WAN solution comprising a system for transmitting "real-time" AV content from a media source 301 (e.g., an Internet media content provider) to a media sink 302 (e.g., home entertainment system 210) over a path that traverses multiple heterogeneous networks comprising two or more of a (i) constant delay network 311, (ii) variable delay network 312 with a common time base 322, and/or (iii) a variable delay network without a common time base 313. Gray, Figs. 2-3, ¶¶ 13, 53-57.

45. To deliver the "real-time" AV content from the media source 301 to the media sink 302 over multiple networks within "the minimal jitter tolerances required to support real-time presentation of the multimedia data" at the media sink 302 (i.e., to avoid "choppy" or "stuttering" playback), Gray deploys gateways 331 "between each network in the heterogeneous networks" to emulate a constant delay network over the multiple heterogeneous networks. Gray, ¶¶ 6, 59, Fig. 6.

46. In Gray, each gateway interprets (and when appropriate, modifies) time stamps in each multimedia packet, and then forwards each multimedia packet to the next heterogeneous network based on the time stamps to "provide for the delivery of multimedia packets regardless of the heterogenic nature of the networks that intervene between the multimedia source and the multimedia sink" so that "streaming multimedia data may be available regardless of the location of the user," thereby "represent[ing] a significant improvement over the state of the art." Gray, ¶¶ 63-70.

47. Gray does not disclose a scenario where a first media synch player plays media content (in synchrony or otherwise) based on a "frame-specific time stamp" that the first media synch player also sends to another media synch player.

48. Gray does not disclose using a "frame-specific time stamp" for synchronizing playback among multiple playback devices.

Combining and Modifying Blank and Gray

49. A person of ordinary skill in the art at the time of the invention would not have been motivated to combine the components of Blank and Gray into the hypothetical consolidated device proposed in the Office Action, and then further configure such a hypothetical consolidated device to perform the functions recited in the claims of Millington '357, as further proposed in the Office Action.

50. Blank nowhere suggests that it would be desirable to combine the media synch player, control console, and time server components in Blank into the hypothetical consolidated device proposed in the Office Action.

51. There are technical, economic, and operational reasons not to combine the functionalities of the media synch player, control console, and time server into the proposed hypothetical consolidated device.

52. It would be more expensive to design and manufacture the hypothetical consolidated device than to design and manufacture the media synch player disclosed in Blank because additional components and programming required to perform the time server and control console functions would need to be added to the media synch player device to create the hypothetical consolidated device.

53. It would be more expensive to deploy a network of hypothetical consolidated devices than a network that included separate media synch players, a control console, and a time server because each display in Blank requires a media synch player, and the additional cost of using the hypothetical consolidated device at each display versus a media synch player would increase linearly with the number of displays deployed in the network.

54. It would be inefficient for a system operator to use a hypothetical consolidated device to control Blank's network because the system operator would be using only the control console feature of the hypothetical consolidated device to control Blank's network.

55. It would be cumbersome for a system operator to manage Blank's network via a hypothetical consolidated device that was also rendering content on a display.

56. If every hypothetical consolidated device had the ability to transmit and receive audio content, playback timing information, and device clock information to/from any other hypothetical consolidated device, then configuration and operation of a network of hypothetical consolidated devices would be more complex than Blank's disclosed network where each of the media synch player 110, control console 125, and time server 120 devices performs its own

specialized role in the network because it would be more time-consuming to configure individual hypothetical consolidated devices to perform their specific functions in the network than it would be to configure a single time server 120, control console 125, and media synch players 110 to each perform its own specialized role.

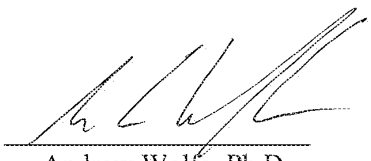
57. A person of skill in the art at the time of the invention would not have been motivated modify the system in Blank to use the time stamps in Gray for synchronizing playback among multiple playback devices as proposed in the Office Action because Blank already solves the problem of synchronous playback among multiple playback devices, albeit in a different way than recited in the claims.

58. Neither Blank nor Gray suggests that the time stamps in Gray's WAN solution for emulating a constant delay network over multiple heterogeneous networks could be used in Blank's LAN solution to facilitate synchronous playback among multiple devices. Gray, ¶¶ 6, 59, Fig. 6.

59. Neither Blank nor Gray suggest to a person of skill in the art how Gray's time stamps could be used as "playback timing information associated with...audio information" in combination with "audio information" and "device clock information" to facilitate synchronous playback among multiple devices.

60. I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date: December 20, 2017

By: 

Andrew Wolfe, Ph.D.

EXHIBIT 1

Andrew Wolfe Ph.D.

20 S. Santa Cruz Ave. Suite 101
Los Gatos, CA 95030
(408) 402-5872 (office) (408) 394-1096 (mobile)
Email: awolfe@awolfe.org

Education:

Ph.D. in Computer Engineering, Carnegie Mellon University, 1992
Visiting Graduate Student, Center for Reliable Computing, Stanford University, 1988-1989
M.S. in Electrical and Computer Engineering, Carnegie Mellon University, 1987
B.S.E.E. in Electrical Engineering and Computer Science, The Johns Hopkins University, 1985

Recent Employment:

Consultant, [October 2002-present]
Wolfe Consulting

Consultant on processor technology, computer systems, consumer electronics, software, design tools, and intellectual property issues. Testifying and consulting expert for IP and other technology-related litigation matters.

Sample clients include:

AMD	Nvidia	Samsung
IBM	Motorola	HTC
SMIC	AMKOR	Huawei
Dell	Honeywell	Western Digital
Nintendo	Kingston	Sonos
Moneygram	Arraycomm	Insilica
Synaptics	Activision	Sawstop
Mysticom	P.A.R.C.	Quester Ventures

Lecturer, [September 2013-present]
Santa Clara University

Teaching graduate and undergraduate courses on computer architecture, electronics and embedded computing, and mechatronics.

Chief Technical Officer, [1999-2002]; Sr. VP of Business Development, [2001-2002]; VP, Systems Integration, S3 Fellow , [1998 – 1999]; Director of Technology, S3 Fellow , [1997 - 1998]
SONIC|blue, Inc, Santa Clara, CA (formerly S3 Inc.)

Strategic Business Development:
Developed and implemented strategy to reposition S3 from PC graphics into the leading networked consumer electronics company.

- Acquired Diamond Multimedia and coordinated integration of communications, Rio digital music, and workstation graphics divisions into S3.
- Identified and negotiated acquisitions to grow digital media businesses including Empeg, ReplayTV, and Sensory Science.
- Identified and negotiated strategic investments including Comsilica, Intellon, KBGear Interactive, Entridia, DataPlay and others.
- Developed strategy for integrated graphics/core-logic products and established a joint venture with Via Technologies to design and market these products.
- Negotiated divestiture of graphics chip business to Via and the workstation graphics division to ATI.

Product Planning and Development:

- Drove roadmap development within SONICblue product divisions.
- Managed Business Development for all product lines.
- Led New Product Development and Corporate Vision processes.
- Acting co-General Manager of Rio digital music business in 2nd half of 2001. Responsible for all areas of product development, business development, and cost management.
- Managed development of the Savage/MX and Savage/IX mobile 3D graphics accelerators and Savage/NB system logic products.

Public Relations, Public Policy and Investor Relations:

- Present company products and strategy at industry events such as CES, Comdex, and Microprocessor Forum.
- Discuss new products and initiatives with the press.
- Promote issues of interest to SONICblue to industry groups and in Washington.
- Brief analysts, and investors on company progress. Participate in quarterly conference calls.

IP Management and Licensing:

- Negotiated and managed partnership agreements including a critical cross-licensing agreement with Intel.
- Renegotiated technology-licensing agreements with IBM for workstation graphics products.
- Evaluated outside technology opportunities, managed video research and development, and managed corporate IP strategy with legal staff including patent filings, cross licensing, and litigation.

Consulting Professor , [1999-2002]
Stanford University, Stanford, CA

Teaching computer architecture and microprocessor design.

Assistant Professor [1991 - 1997]
Princeton University, Princeton, NJ

Teaching and research in the Electrical Engineering department. Research in embedded computing systems, multimedia, video signal processors, compiler optimization, and high performance computer architecture. Principal investigator or project manager for ~$6M in funded research.

Visiting Assistant Professor , [1992]
Carnegie Mellon University, Pittsburgh, PA

Research and preparation of teaching materials on advanced microprocessor designs including new superscalar and superpipelined processor architectures.

Founder and Vice President and Consultant, [1989 - 1995]
The Graphics Technology Company, Inc., Austin, TX

Founded company to develop touch-sensitive components and systems for the first generation of PDA devices and interactive public systems. Obtained financing from Gunze Corp., Osaka, Japan. Company is now part of 3M.

Senior Electrical Engineer, [1989]
ESL - TRW, Advanced Technology Division, Sunnyvale, CA

Designed the architecture for an Intel i860-based multiple-processor digital signal processing system for advanced military applications. Designed several FPGA interface chips for VME-bus systems.

Design Consultant, [1986 -1987]
Carroll Touch Division, AMP Inc., Round Rock, TX

Developed several new technologies for touch-screen systems. Designed the first ASIC produced for AMP, a mixed-signal interface chip for controlling touch-screen sensors. Developed the system electronics, system firmware, and customer utility software for numerous products including those based on the new ASIC.

Senior Design Engineer, [1983 -1985]
Touch Technology Inc., Annapolis, MD

Advisory Boards:

Director, Turtle Beach Corporation (NASDAQ:HEAR) (formerly Parametric Sound Corporation), KBGear Interactive, Inc., Comsilica, Inc., Rioport.com, various S3 subsidiaries.

Technical Advisory Boards, Ageia, Inc., Intellon, Inc., Comsilica, Inc., Entridia, Inc., Siroyan, Ltd., BOPS, Inc, Quester Venture Funds

Carnegie Mellon University Silicon Valley Advisory Board; Johns Hopkins University Tech Transfer Advisory Board

Awards:

Micro Test-of-Time Award (in recognition of one of the ten most influential papers of the first 25 years of the symposium), 2014
Business 2.0 "20 Young Executives You Need to Know", 2002
Walter C. Johnson Prize for Teaching Excellence, 1997.
Princeton University Engineering Council Excellence in Teaching Award, Spring 1996
AT&T/Lucent Foundation Research Award, 1996.
Walter C. Johnson Prize for Teaching Excellence, 1995
IEEE Certificate of Appreciation, 1995, 2001.
AT&T Foundation Research Award, 1993.
Semiconductor Research Corporation Fellow, 1986 - 1991.
Burroughs Corporation Fellowship in Engineering, 1985 - 1986.

Professional Activities:

Program Chair: Micro-24, 1991, Hot Chips 13, 2001.

General Chair: Micro-26, 1993, Micro-33, 2000.

Associate Editor: IEEE Computer Architecture Letters; ACM Transactions in Embedded Computing Systems

Speaker at CES, WinHec, Comdex, Intel Dev. Forum, Digital Media Summit, Microprocessor Forum, etc.

Keynote speaker at Micro-34, ICME 2002

IEEE B. Ramakrishna Rau Award committee – 2012-2016

IEEE Computer Society Awards Committee – 2015

CES Awards Judge - 2016

Over 50 refereed publications.

Publications since January 2006:

Wolfe, A., "Retrospective on Code Compression and a Fresh Approach to Embedded Systems", IEEE MICRO, July/Aug. 2016, Invited paper.

Patents:

U.S. Pat. 5,041,701 – *Edge Linearization Device for a Contact Input System*, Aug. 20, 1991.
U.S. Pat. 5,438,168 – *Touch Panel*, Aug. 1, 1995.
U.S. Pat. 5,736,688 – *Curvilinear Linearization Device for Touch Systems*, Apr. 7, 1998.
U.S. Pat. 6,037,930 – *Multimodal touch sensitive peripheral device*, March 14, 2000.
U.S. Pat. 6,408,421 – *High-speed asynchronous decoder circuit for variable-length coded data*, June 18, 2002.
U.S. Pat. 6,865,668 – *Variable-length, high-speed, asynchronous decoder circuit*, March 8, 2005
U.S. Pat. 7,079,133 – *Superscalar 3D Graphics Engine*, July 18, 2006
EP 1 661 131 B1 – *PORTABLE ENTERTAINMENT APPARATUS*, Jan. 21, 2009
U.S. Pat. 7,555,006 – *Method and system for adaptive transcoding and transrating in a video network*, June 30, 2009
U.S. Pat. 7,996,595 – *Interrupt Arbitration for Multiprocessors*, Aug. 9, 2011
EP 2 241 979 B1 – *Interrupt Arbitration for Multiprocessors*, Oct. 10, 2011
GB201121568D0 – *Mapping Of Computer Threads onto Heterogeneous Resources*, Jan. 25, 2012
U.S. Pat. 8,131,970 – *Compiler Based Cache Allocation*, March 6, 2012
U.S. Pat. 8,180,963 – *Hierarchical read-combining local memories*, May 15, 2012
U.S. Pat. 8,193,941 – *Snoring Treatment*, June 5, 2012
U.S. Pat. 8,203,541 – *OLED display and sensor*, June 19, 2012
U.S. Pat. 8,243,045 – *Touch-sensitive display device and method*, August 14, 2012
U.S. Pat. 8,244,982 – *Allocating processor cores with cache memory associativity*, August 14, 2012
U.S. Pat. 8,260,996 – *Interrupt Optimization for Multiprocessors*, Sept. 4, 2012
101185761 (KR) – *Noise Cancellation for Phone Conversation*, Sept. 19, 2012
101200740 (KR) – *OLED display and sensor*, November 7, 2012
101200741 (KR) – *Touch-sensitive display device and method*, November 7, 2012
U.S. Pat. 8,321,614 – *Dynamic scheduling interrupt controller for multiprocessors*, Nov. 27, 2012
U.S. Pat. 8,352,679 – *Selectively securing data and/or erasing secure data caches responsive to security compromising conditions*, Jan. 8, 2013
U.S. Pat. 8,355,541 – *Texture Sensing*, Jan. 15, 2013
U.S. Pat. 8,370,307 – *Cloud Data Backup Storage Manager*, Feb. 5, 2013
U.S. Pat. 8,398,451 – *Tactile Input Interaction*, March. 19, 2013
JP 5241032 B2 – *Routing Across Multicore Network Using Real World or Modeled Data*, April 13, 2013
ZL201010124820.3 – *Interrupt Optimization for Multiprocessors*, April 17, 2013
U.S. Pat. 8,428,438 – *Apparatus for Viewing Television with Pause Capability*, April 23, 2013
JP 5266197 B2 – *Data Centers Task Mapping*, May 10, 2013
U.S. Pat. 8,508,498 – *Direction and Force Sensing Input Device*, August 13, 2013
U.S. Pat. 8,547,457 – *Camera Flash Mitigation*, October 1, 2013
U.S. Pat. 8,549,339 – *Processor core communication in multi-core processor*, October 1, 2013
101319048 (KR) – *Camera Flash Mitigation*, October 10, 2013
U.S. Pat. 8,628,478 – *Microphone for remote health sensing*, January 14, 2014
101362017 (KR) – *Thread Shift: Allocating Threads to Cores*, Feb. 5, 2014
101361928 (KR) – *Cache Prefill on Thread Migration*, Feb. 5, 2014
101361945 (KR) – *Mapping Of Computer Threads onto Heterogeneous Resources*, Feb. 5, 2014
JP 5484580 B2 – *Task Scheduling Based on Financial Impact*, Feb. 28, 2014
JP 5487306 B2 – *Cache Prefill on Thread Migration*, Feb. 28, 2014
101372623 (KR) – *Power Management for Processor*, March. 4, 2014
101373925 (KR) – *Allocating Processor Cores with Cache Memory Associativity*, March 6, 2014
U.S. Pat. 8,676,668 – *Method for the determination of a time, location, and quantity of goods to be made available based on mapped population activity*, March 18, 2014
U.S. Pat. 8,687,533 – *Energy Reservation in Power Limited Networks*, April 1, 2014
101388735 (KR) – *Routing Across Multicore Networks Using Real World or Modeled Data*, April 17, 2014
JP 5487307 B2 – *Mapping Of Computer Threads onto Heterogeneous Resources*, May. 7, 2014
U.S. Pat. 8,725,697 – *Cloud Data Backup Storage*, May 13, 2014
U.S. Pat. 8,726,043 – *Securing Backing Storage Data Passed Through a Network*, May 13, 2014
ZL201010124826.0 – *Dynamic scheduling interrupt controller for multiprocessors*, May 14, 2014
JP 5547820 B2 – *Processor core communication in multi-core processor*, May 23, 2014

U.S. Pat. 8,738,949 – *Power Management for Processor*, May 27, 2014
U.S. Pat. 8,751,854 – *Processor Core Clock Rate Selection*, June 10, 2014
JP 5559891 B2 – *Thermal Management in Multi-Core Processor*, June 13, 2014
101414033 (KR) – *Dynamic Computation Allocation*, June 25, 2014
JP 5571184 B2 – *Dynamic Computation Allocation*, July 4, 2014
101426341 (KR) – *Processor core communication in multi-core processor*, May 23, 2014
U.S. Pat. 8,799,671 – *Techniques for Detecting Encrypted Data*, Aug 5, 2014
101433485 (KR) – *Task Scheduling Based on Financial Impact*, Aug. 18, 2014
U.S. Pat. 8,824,666 – *Noise Cancellation for Phone Conversation*, Sept. 2, 2014
U.S. Pat. 8,836,516 – *Snoring Treatment*, Sept. 16, 2014
U.S. Pat. 8,838,370 – *Traffic flow model to provide traffic flow information*, Sept. 16, 2014
U.S. Pat. 8,838,797 – *Dynamic Computation Allocation*, Sept. 16, 2014
U.S. Pat. 8,854,379 – *Routing Across Multicore Networks Using Real World or Modeled Data*, Oct. 7, 2014
JP 5615361 B2 – *Thread Shift: Allocating Threads to Cores*, Oct. 15, 2014
U.S. Pat. 8,866,621 – *Sudden infant death prevention clothing*, Oct. 21, 2014
U.S. Pat. 8,881,157 – *Allocating threads to cores based on threads falling behind threads*, Nov. 4, 2014
U.S. Pat. 8,882,677 – *Microphone for remote health sensing*, Nov. 11, 2014
U.S. Pat. 8,924,743 – *Securing Data Cache through Encryption*, December 30, 2014
U.S. Pat. 8,994,857 – *Camera Flash Mitigation*, March 31, 2015
JP 5699140 B2 – *Camera Flash Mitigation*, April 8, 2015
U.S. Pat. 9,143,814 – *Method and system for adaptive transcoding and transrating in a video network*, Sept 22, 2015
CN102483703B – *Mapping Of Computer Threads onto Heterogeneous Resources*, Oct. 14, 2015
U.S. Pat. 9,178,694 – *Securing Backing Storage Data Passed Through a Network*, November 3, 2015
U.S. Pat. 9,189,282 – *Thread-to-core mapping based on thread deadline, thread demand, and hardware characteristics data collected by a performance counter*, November 17, 2015
U.S. Pat. 9,189,448 – *Routing image data across on-chip networks*, November 17, 2015
U.S. Pat. 9,208,093 – *Allocation of memory space to individual processor cores*, December 8, 2015
U.S. Pat. 9,239,994 – *Data Centers Task Mapping*, January 19, 2016
EP2228779 B1 – *Traffic flow model to provide traffic flow information*, Jan. 27, 2016
U.S. Pat. 9,262,628 – *Operating System Sandbox*, February 16, 2016
U.S. Pat. 9,330,137 – *Cloud Data Backup Storage Manager*, May. 3, 2016
U.S. Pat. 9,519,305 – *Processor Core Clock Rate Selection*, December 13, 2016
U.S. Pat. 9,569,270 – *Mapping thread phases onto heterogeneous cores based on execution characteristics and cache line eviction count*, February 14, 2017

Testimony by deposition or at trial – September 20, 2012 - -present

Case	Venue	Case Number
ACER, INC., ACER AMERICA CORPORATION and GATEWAY, INC v TECHNOLOGY PROPERTIES LIMITED, PATRIOT SCIENTIFIC CORPORATION, and ALLIACENSE LIMITED	Northern District of California	5:08-cv-00877 IF
TVI v SONY CORPORATION et. al	Northern District of California	5:10-cv-00475-JF/HRL
Walker Digital, LLC v. Ayre Acoustics, Inc. et al	ITC	337 -TA-824
ENOVA TECHNOLOGY CORPORATION v INITIO CORPORATION, INITIO CORPORATION (California), WESTERN DIGITAL CORPORATION, BUFFALO INC., and BUFFALO TECHNOLOGY (USA), INC.	District of Delaware	C.A. 10-040LPS
In the Matter of Certain Consumer Electronics and Display Devices and Products Containing Same (GPH v HTC)	ITC	337-TA-836
In the Matter of Computers and Computer Peripheral Devices and Components Thereof and Products Containing the Same (TPL v Kingston et. al)	ITC	337-TA-841
In the Matter of Certain Electronic Imaging Devices (Flashpoint)	ITC	337-TA-850
Pacing Technologies LLC v. Garmin International and Garmin USA, Inc.	Southern Dist. of California	CV 12-1067 BEN
ProconGPS, Inc. v. Star Sensor, LLC et al.	Northern District of California	3:12-cv-01903-SI
Spireon, Inc. v. CallPass Tech, LLC et al	Northern District of California	3:12-cv-01903-SI
PQ Labs, Inc v Yang Qi, Zaagtech Inc, Jinpeng Li, Haipeng Li.	Northern District of California	12--00450-CW
In the Matter of Certain Consumer Electronics with Display and Processing Capabilities (GPH v Vizio)	ITC	337-TA-884
Florida Atlantic University Research Corporation, et al. v. TPV Technology Limited, et al	S.D. Fla.	09-12-CV-80701 09-12-CV-80694 09-12-CV-80697
Inter Partes Review of: U.S. Patent No.: 8,294,677 and U.S. Patent No.: 8,330,738 (TPK v Wintek)	PTO	IPR2013-00433 IPR2013-00436
Inter Partes Review of: U.S. Patent No.: 8,176,267 (SMI v Phison)	PTO	IPR2013-00473
Immersion Technologies v HTC CORPORATION et al.	District of Delaware	1:12-cv-00259-UNA
Smartflash v. Samsung et al.	E. D. Texas	6:13-CV-448
Black Hills Media LLC v Sonos LLC	C.D. California	2:14-cv-00486
Kangaroo Media, Inc. et al. v. YinzCam, Inc.	District of Western Pennsylvania	2:12-cv-00382-JFC
Inter Partes Review of: U.S. Patent No. 8,176,267 (CATR v Kingston)	PTO	IPR2015-00149
Inter Partes Review of: U.S. Patent No. 6,890,188 (Imation v Kingston)	PTO	IPR2015-00066
INTELLECTUAL VENTURES II LLC v JP MORGAN CHASE & CO., et al.,	Southern District of NY	13 Civ. 3777
Samsung Electronics Co., Ltd. and Samsung Electronics America Inc. vs. NVIDIA Corporation, Old Micro, Inc. f/k/a Velocity Micro, Inc., and Velocity Holdings, LLC	E. D. Virginia	3:14-cv-00757-REP

Certain Touchscreen Controllers and Products Containing Same (Synaptics v Shenzhen Huiding Technology Co., Ltd)	ITC	337-TA-957
Inter Partes Review of: U.S. Patent No. 7,742,053 (LG v ATI) (also 6,897,871 and 7,327,369)	PTO	IPR2015-00325 IPR2015-00326 IPR2015-00330
Ericsson Inc., et al. v TCL Communication Technology Holdings, LTD, et al.	E. D. Texas	2:15-cv-11
Certain Table Saws Incorporating Active Injury Mitigation Technology and Components Thereof (Sawstop v Bosch)	ITC	337-TA-965
INTER PARTES REVIEW OF U.S. PATENT NO. RE43,931 (TCL v Ericsson)	PTO	IPR2015-01602 IPR2015-01637 IPR2015-01641 IPR2015-01646 IPR2015-01674 IPR2015-01676 IPR2015-01761 IPR2015-01806
T-Mobile, USA, Inc. v. Huawei Device USA, Inc. and Huawei Technologies Co., Ltd.	W. D. Washington	14-cv-1351
AVM Technologies, LLC v. Intel Corporation and Related Matters	District of Delaware	15-33-RGA
TCL v. Ericsson, et al.	C.D. California	8:14-cv-341
Sonos Inc. v D&M Holdings Inc. d/b/a the D&M Group; D&M Holdings U.S. Inc. and Denon Electronics (USA) LLC.	District of Delaware	14-1330-RGA

PTO/SB/26a (02-14)
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.

TERMINAL DISCLAIMER IN A PATENT OR PROCEEDING IN VIEW OF ANOTHER PATENT

Docket Number (Optional)
04-0401-REEXAM

Application/Control Number: 90/013,959
Filing Date: 2017-06-16
First Named Inventor: Millington
Title: Obtaining Content from Remote Source For Playback
Patent No.: 9,213,357

The patentee, Sonos, Inc, owner of 100 percent interest in the instant patent hereby disclaims, except as provided below, the terminal part of the statutory term of the instant patent which would extend beyond the expiration date of the full statutory term of patent No. 9,195,258 (the "**reference** patent"), as the term of said **reference** patent is presently shortened by any terminal disclaimer. The patentee hereby agrees that the instant patent shall be enforceable only for and during such period that the instant patent and the **reference** patent are commonly owned. This agreement runs with the instant patent and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the patentee does not disclaim the terminal part of the instant patent that would extend to the expiration date of the full statutory term of the **reference** patent, "as the term of said **reference patent** is presently shortened by any terminal disclaimer," in the event that said **reference** 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 shortened by any terminal disclaimer.

I. Check either box 1, 2, or 3 below, as appropriate, if there is an assignment:

1. ☐ The current ownership was established by the filing of a statement under 37 CFR 3.73 during prosecution of the application that issued as the instant patent.

2. ☐ The instant patent was issued from an application filed on or after September 16, 2012, and the current patent owner was the applicant under 37 CFR 1.46.

3. ☑ A statement under 37 CFR 3.73 is attached herewith. Form PTO/SB/96 or PTO/AIA/96, as appropriate, may be used.

II. Authorization for Terminal Disclaimer - Check either box 1 or 2 below, if appropriate:

I hereby acknowledge that any willful false statements made are punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

2. ☑ The undersigned is an attorney or agent of record. Reg. No. 54967

/Jeffrey P. Armstrong/	December 20, 2017
Signature	Date
Jeffrey P. Armstrong	312-913-0001
Typed or printed name	Telephone number

☑ The terminal disclaimer fee under 37 CFR 1.20(d) is included.

NOTE: Submit multiple forms if more than one signature is required, see below.*

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.

☑ *Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. 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/96 (07-09)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Sonos, Inc.

Application No./Patent No.: 9,213,357 Filed/Issue Date: December 15, 2015

Titled: Obtaining Content from Remote Source for Playback

Sonos, Inc , a corporation

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.

states that it is:

1. ☒ the assignee of the entire right, title, and interest in;

2. ☐ an assignee of less than the entire right, title, and interest in (The extent (by percentage) of its ownership interest is _____ %); or

3. ☐ the assignee of an undivided interest in the entirety of (a complete assignment from one of the joint inventors was made)

the patent application/patent identified above, by virtue of either:

A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 035518, Frame 0127, or for which a copy therefore is attached.

OR

B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

2. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☐ As required by 37 CFR 3.73(b)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (*i.e.*, a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/Jeffrey P. Armstrong/ December 20, 2017

Signature Date

Jeffrey P. Armstrong Attorney of Record

Printed or Typed Name Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. 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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2016	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source For Playback	)	

U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

PATENTEE'S SUMMARY OF THE EXAMINER INTERVIEW ON NOVEMBER 16, 2017

An in-person examiner interview took place at the U.S. Patent Office on November 16, 2017. Participants included Examiners David England, Roland Foster, and Michael Fuelling and Patentee's representatives, Chris Butts and Jeff Armstrong. During the interview, the participants discussed claim 9, the § 103 rejections in the Office Action, and the Edens, Blank, and Gray references, and Patentee sought further clarification regarding the Office's proposed broadest reasonable interpretation of "independently clocked" in the Office Action.

First, Patentee's representatives demonstrated two Sonos One playback devices playing audio content in synchrony from an Apple iPhone. The Sonos One playback devices and iPhone were connected to a WiFi network, and the audio content was stored on the iPhone. In operation, the first Sonos One (i) obtained the audio content from the iPhone via the WiFi network; (ii) transmitted the audio content, playback timing information for the audio content, and its device clock information to the second Sonos One via the WiFi network; and (iii) played the audio

content in synchrony with the second Sonos One by using the playback timing for the audio content and its device clock information. During synchronous playback, the first Sonos One and the second Sonos One operated in accordance with their own respective clocks.

Then, Patentee's representatives discussed the technical differences between the devices configured to operate on a synchronous logical ring network as described in Edens and the playback devices recited in the claims and explained that a person of skill in the art at the time of the invention would not have been motivated to modify and combine Blank and Gray in the manner proposed in the Office Action to arrive at the claimed invention.

No agreement on the claims was reached. Patentee agreed to file a response detailing the arguments for patentability over Edens, Blank, Gray, Handbook, and the alleged APA.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: December 20, 2017

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

PTO/SB/08a (01-10)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (**Not for submission under 37 CFR 1.99)**		
	Application Number	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

U.S.PATENTS						
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.						

U.S.PATENT APPLICATION PUBLICATIONS						
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.						

FOREIGN PATENT DOCUMENTS								
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								

NON-PATENT LITERATURE DOCUMENTS			
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	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

	1	Order; Case 1:14-cv-01330-WCB; Document 471; Filed 11/30/17 (2 pages)	☐
	2	Letter in Response to Defendant's Letter; Case 1:14-cv-01330-WCB; Document 470; Filed 11/30/17 (1 page)	☐
	3	Defendant's Letter with Exhibits Redacted; Case 1:14-cv-01330-WCB; Filed 11/30/17 (17 pages)	☐
	4	Jury Verdict; Case 1:14-cv-01330-WCB; Document 528; Filed 12/15/17 (6 pages)	☐

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

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	90013959
	Filing Date	2016-06-16
	First Named Inventor	Millington
	Art Unit	3992
	Examiner Name	England
	Attorney Docket Number	04-0401-REEXAM

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	/Jeffrey P. Armstrong/	Date (YYYY-MM-DD)	2017-12-20
Name/Print	Jeffrey P. Armstrong	Registration Number	54,967

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.**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

CERTIFICATE OF SERVICE

The undersigned hereby certifies that copies of the Response to the Non-Final Office Action, the Declaration of Andrew Wolfe, the Terminal Disclaimer, the 37 CFR 3.73(b) Statement, the Examiner Interview Summary, the Information Disclosure Statement, the non-patent literature references cited in the Information Disclosure Statement, and this Certificate of Service, all of which were filed at the U.S. Patent Office on December 20, 2017, are being served, in their entirety, via Federal Express, upon the following third-party requester:

Jackson Walker LLP
Attn: Christopher J. Rourk
2323 Ross Avenue, Suite 600
Dallas, TX 75201

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: December 20, 2017 By: /Jeffrey P. Armstrong/
Jeffrey P. Armstrong
Reg. No. 54,967

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No.: 04-0401-REEXAM)
(MBHB No. 14-1800-REX)

In the *Ex Parte* Reexamination of:	)	
	)	
U.S. Pat. 9,213,357	)	Art Unit: 3992
	)	
Serial No.: 90/013,959	)	Examiner: David E. England
	)	
Filed: June 16, 2017	)	Confirmation No. 9548
	)	
For: Obtaining Content from Remote Source for Playback	)	
	)	

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

GENERAL AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

Patentee authorizes the Office to charge any fees required for prosecution of the above-captioned *ex parte* reexamination to Deposit Account 13-2490, including but not limited to any fees required to process the terminal disclaimer filed herewith on December 20, 2017.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff LLP

Date: December 20, 2017

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

Electronic Acknowledgement Receipt	
EFS ID:	31297186
Application Number:	90013959
International Application Number:	
Confirmation Number:	9548
Title of Invention:	OBTAINING CONTENT FROM REMOTE SOURCE FOR PLAYBACK
First Named Inventor/Applicant Name:	9213357
Customer Number:	107361
Filer:	Jeffrey Armstrong
Filer Authorized By:	
Attorney Docket Number:	04-0401-REEXAM (14-1800-R
Receipt Date:	20-DEC-2017
Filing Date:	16-JUN-2017
Time Stamp:	20:41:44
Application Type:	Reexam (Patent Owner)

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		04-0401-REEXAM_Response_and_Declaration.pdf	1394062 18bdd30cfcf594c4bed0d5fb86f14fe29ff34c38	yes	57

	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	34		
	Affidavit-not covered under specific rule	35	57		
Warnings:					
Information:					
2	Terminal Disclaimer Filed	04-0401-REEXAM_TD_Disclaimer.pdf	138202 5eff3a56e71647087afc73dc7864eb7f289cd997	no	1
Warnings:					
Information:					
3	Assignee showing of ownership per 37 CFR 3.73	04-0401-REEXAM_TD_373_Statement_of_Ownership.pdf	70054 341a80bbcb325c8aca0f2c46210e63caaea4f622	no	1
Warnings:					
Information:					
4	Applicant summary of interview with examiner	04-0401-REEXAM_Interview_Summary.pdf	85948 0d7208469d2cab06ac3e7afc8ac0e53e5e811ab3	no	2
Warnings:					
Information:					
5	Information Disclosure Statement (IDS) Form (SB08)	04-0401-REEXAM_IDS.pdf	62909 67a662019e52bb4158847334c961de330cdb4926	no	3
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
6	Non Patent Literature	04-0401-REEXAM_IDS_NPL_01_Order.pdf	1670092 e4c08b0f58222c8d481e9a7ef43cec25a3350b41	no	2
Warnings:					
Information:					

7	Non Patent Literature	04-0401-REEXAM_IDS_NPL_02_Sonos_Letter.pdf	999140 2fc7e241d5b33e7f8237a18c517314f092d992ce	no	1
Warnings:					
Information:					
8	Non Patent Literature	04-0401-REEXAM_IDS_NPL_03_DM_Letter.pdf	20121343 13034c93bd0fedb242623b7d3198783e96609d39	no	17
Warnings:					
Information:					
9	Non Patent Literature	04-0401-REEXAM_IDS_NPL_04_Jury_Verdict.pdf	321824 934c5efd50fe69bf4bf3f46a72ffd82a2d714018	no	6
Warnings:					
Information:					
10	Reexam Certificate of Service	04-0401-REEXAM_Certificate_of_Service.pdf	78614 8b7100e1510539318dbb4ec6e40279efb46346db	no	1
Warnings:					
Information:					
11	Miscellaneous Incoming Letter	04-0401-REEXAM_Authorization.pdf	79911 4c95a3d26d82fcaf1a8f2713c433ddd70ddd9d0e	no	1
Warnings:					
Information:					
		Total Files Size (in bytes):	25022099		

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 11/22/2017

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
11/22/2017	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.

Reexamination	**Application/Control No.** 90013959	**Applicant(s)/Patent Under Reexamination** 9213357
	Certificate Date	**Certificate Number**

Requester Correspondence Address: ☐ **Patent Owner** ☒ **Third Party**
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	11/17/2017 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., United States District Court		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

Ex Parte Reexamination Interview Summary	**Control No.**	**Patent Under Reexamination**
	90/013,959	9213357
	Examiner	**Art Unit**
	DAVID ENGLAND	3992

All participants (USPTO personnel, patent owner, patent owner's representative):

(1) *DAVID ENGLAND*	(3) *Roland Foster, Primary Re-examiner*
(2) *Michael Fuelling, SPR*	(4) *Jeffrey Armstrong 54967, Christopher Butts 67558*

Date of Interview: *16 November 2017*

Type: a)☐ Telephonic b)☒ Video Conference
c)☒ Personal (copy given to: 1)☐ patent owner 2)☐ patent owner's representative)

Exhibit shown or demonstration conducted: d)☒ Yes e)☐ No.
If Yes, brief description: *The Attorneys demonstrated how claim 9 works with their devices. Mainly how the connection process works and the devices playback music in synchronicity. The Attorneys of record will also submit a complete detailed description of how the demonstration was conducted.*

Agreement with respect to the claims f)☐ was reached. g)☐ was not reached. h)☒ N/A.
Any other agreement(s) are set forth below under "Description of the general nature of what was agreed to…"

Claim(s) discussed: *9*.

Identification of prior art discussed: *Edens, the Handbook, APA, Blank, and Gray*.

Description of the general nature of what was agreed to if an agreement was reached, or any other comments:
See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims patentable, if available, must be attached. Also, where no copy of the amendments that would render the claims patentable is available, a summary thereof must be attached.)

A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION MUST INCLUDE PATENT OWNER'S STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. (See MPEP § 2281). IF A RESPONSE TO THE LAST OFFICE ACTION HAS ALREADY BEEN FILED, THEN PATENT OWNER IS GIVEN **ONE MONTH** FROM THIS INTERVIEW DATE TO PROVIDE THE MANDATORY STATEMENT OF THE SUBSTANCE OF THE INTERVIEW (37 CFR 1.560(b)). THE REQUIREMENT FOR PATENT OWNER'S STATEMENT CAN NOT BE WAIVED. **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

/DAVID ENGLAND/ Primary Examiner, Art Unit 3992		

cc: Requester (if third party requester)

Continuation of Description of the general nature of what was agreed to if an agreement was reached, or any other comments: In the attached interview agenda, the Attorneys of record discussed to main points, see sections 'A' and 'B' of the interview agenda. As to discussion point 'A', the Examiner stated that if the network topology was a pivotal point in overcoming the rejection to submit a very detailed explanation of what was submitted in the agenda and possibly a declaration from an expert explaining why the art would not read on the claims as discussed in point 'A'. As to discussion point 'B', the Examiner stated that if the Attorneys felt the court cases that are cited would aid in furthering their discussion point, to submit examples from the court decisions along with a more detailed explanation as to why the combination of Blank, Gray, and the APA would not be combinable. Examiner further stated that the term "independently clocked" is still broad and could be interpreted in many different ways since it is not explicitly defined in the specification. The Attorneys of record stated they will submit further explanation on the term that was already discussed in a court proceeding along with other explanation as to how the term is to be interpreted under BRI. The Examiner awaits the Applicant's official response .

LINKPLAY EXHIBIT 1004
Page 494 of 4822

McDonnell Boehnen Hulbert & Berghoff
Law Offices

300 South Wacker Drive
Chicago, Illinois 60606-6709
www.mbhb.com

312-913-0001 phone
312-913-0002 fax

November 15, 2017

Via email: david.england@uspto.gov

Examiner David E. England
U.S. Patent & Trademark Office
P.O. Box 1450
Arlington, VA 22313-1450

RE: Interview Agenda for 90/013,959 (Sonos 04-0401-REEXAM; 14-1800-REX)

Examiner England:

Thank you for agreeing to interview the above-referenced application on Thursday, November 16, 2017, at 11:45am ET. An agenda of topics is outlined below:

Agenda for the Examiner Interview

- A demonstration of a commercial embodiment of the features recited in the claims
- Independent Claim 9
- The broadest reasonable interpretation of "independently clocked"
- The 35 U.S.C. § 103 rejections in the Office Action
- The technical references cited in the Office Action
    1. U.S. Pat. 6,611,537 (Edens)
    2. *The MP3 and Internet Audio Handbook* (Handbook)
    3. alleged Sonos admitted prior art (APA)
    4. U.S. Pub. 2004/0252400 (Blank)
    5. U.S. Pub. 2002/0150053 (Gray)

Independent Claim 9

9. (Original) A first playback device comprising:

one or more processors;

a network interface; and

tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and

after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The § 103 Rejections

Patentee submits that the claims are patentable over the cited references and requests that the Office withdraw the § 103 rejections.

A. Claims 9-12 and 19 are Patentable over Edens, Handbook, and the alleged APA

Claims 9-12 and 19 are patentable over Edens, Handbook, and the alleged APA for at least the reason that Edens, Handbook, and the alleged APA, individually or in combination, fail to teach or suggest at least "play[ing] back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information," in combination with the other elements recited in the claims.

i. Edens fails to teach or suggest that at least that the playback devices remain independently clocked during synchronous playback

Edens solves the problem of synchronous playback among multiple playback devices in an entirely different manner than that recited by claim 9 of Millington '357.

In contrast to claim 9, Edens discloses a system where playback devices are never independently clocked, and thus, they do not "remain independently clocked" during synchronous playback. Instead, Edens discloses playback devices configured in "a synchronous logical ring network." Edens, 9:58. In Edens's synchronous logical ring network, "fixed frames of information propogat[e] around the network at consistent time intervals (44.1kHz 'frame rates' in one embodiment, to enable device synchronization to the CD audio sample rate)." Edens, 10:12-15.

"[T]he logical ring network ensures that information always will propagate from one device to another at consistent time intervals" so that "the time required for information to propagate between any two particular devices will remain fixed." Edens, 10:15-21.

Because of the network architecture and configuration of Edens's synchronous logical ring network, the playback devices in the synchronous logical network are inherently not independently clocked while in operation, much less during synchronous playback of media content. Thus, Edens fails to teach or suggest at least "play[ing] back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information," in combination with the other elements recited in the claims.

ii. The addition of Handbook fails to overcome the deficiencies of Edens

The Office Action does not cite Handbook for teaching "play[ing] back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information." Office Action, pp. 14-18. Further, Patentee's review of Handbook found no teaching or suggestion of this aspect of the claims.

iii. The addition of alleged APA fails to overcome the deficiencies of Edens and Handbook

Contrary to the assertions in the Office Action, it would not have been obvious to modify the "synchronous logical ring network" of Edens with the teachings of the alleged APA so that the playback devices in Edens "remain independently clocked" during synchronous playback because Edens teaches away from solutions where playback devices are independently clocked.

A reference teaches away from a claimed invention "when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken" in the claim. *Galderma Labs., L.P. v. Tolmar, Inc.*, 737 F.3d 731, 738 (Fed. Cir. 2013).

Here, Edens says, "[a]pplying local area network technology (e.g., Ethernet and TCP/IP network protocols) to consumer electronics devices ***raises a number of problems***" and that "[a]lthough it appears advantageous to connect consumer electronics devices as generic nodes on a network, ***existing network protocols are far from optimized for real-time streams of digital audio*** and video." Edens, 4:47-53 (emphasis added).

Edens further explains that "Ethernet…is not optimized to carry real-time continuous digital media streams" because "[i]t is an asynchronous, packet-based protocol that would add significant overhead to digital audio and video samples, which require consistent and timely delivery, as opposed to the ability to 'burst' packets of information at high speeds on demand." Edens, 5:4-10. Edens teaches that playback devices that use asynchronous transmission protocols to distribute real-time media would be too "complex and expensive devices, due to the memory, buffers, counters and associated circuitry required" to perform synchronous playback of real-time media distributed via asynchronous networks. Edens, 6:38-52.

By distinguishing the "synchronous logical ring network" from asynchronous alternatives and explicitly disparaging alternatives that "cannot guarantee consistent delivery of data such as

real-time continuous digital media streams," Edens, 9:12-14, Edens teaches away from solutions where playback devices in a network are independently clocked.

Because Edens teaches away from networks of independently clocked playback devices, persons of skill in the art at the time of the invention would not have been motivated to modify Edens such that the playback devices "remain independently clocked" during synchronous playback.

B. Claims 9-12 and 19 are Patentable over Blank, Gray, and the alleged APA

Blank, Gray, and the alleged APA do not disclose a network of playback devices where one playback device "(i) obtain[s], via the network interface from the audio information source outside of the LAN, the audio information; (ii) transmit[s], via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play[s] back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information," as recited in the claims. Indeed, the Office Action acknowledges that Blank, Gray, and the alleged APA fail to disclose the specific combination of elements recited in the claims.

Instead, the Office Action contends that various components of Blank and Gray could be modified and combined to arrive at the claimed invention, and proposes that:

(i) "the time server 120 [in Blank] ***could*** be located on a first media synch player 110 [in Blank], and ***could*** provide the master clock that is used to provide the playback timing information," Office Action, pp. 30-31 (emphasis added);

(ii) "the media synch players 110 of Blank or the management system 212 of Gray…***could*** be implemented as PCs or in conjunction with PCS, and which ***can*** transmit audio information, playback timing information and clock information to another playback device for synchronous playback," Office Action, p. 32 (emphasis added); and

(ii) "the media synch players 110 of Blank or the management system 212 of Gray…***could*** be implemented as PCs or in conjunction with PCs, and which ***can*** remain independently clocked during synchronous playback, at least because PCs contain multiple clocks that ***can*** be independent." Office Action, p. 35 (emphasis added).

Patentee disagrees that Blank and/or Gray could be modified in the manner proposed in the Office Action. Nevertheless, the fact that the prior art ***could*** be modified is not sufficient to support the conclusion that a person of skill in the art ***would*** have been motivated to do so. *InTouch Technologies v. VGO Communications*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) (reversing a finding of obviousness that was based on "conclusory references to [the expert's] belief that one of ordinary skill in the art ***could*** combine these references, not that they ***would*** have been motivated to do so.") (emphasis original).

Patentee acknowledges that "[a]ny judgment on obviousness is in a sense necessarily a reconstruction based on hindsight reasoning." MPEP 2145(X)(A) (quoting *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971). But a proper obviousness analysis under § 103 "takes into account only knowledge which was within the level of ordinary skill in the art at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure." *Id*.

Here, nothing in Blank, Gray, or the alleged APA teaches or suggests that the disparate components of Blank and Gray could be combined as proposed and further modified in view of the teachings of the alleged APA to function in the manner recited in the claims.

In the absence of any rational motivation to combine and then further modify the components and features of Blank and Gray as proposed in the Office Action, Applicant's own claim language is the only apparent basis in the record for the proposed combinations and further modifications. When the only roadmap in the record to the claimed invention is based on Applicant's own disclosure, the § 103 rejection is an exercise in impermissible hindsight and should be withdrawn. *Ex Parte Hongwei Kong*, Appeal 2013-0092361 (PTAB, Oct. 22, 2015) (reversing § 103 rejection where "the Examiner has pieced together individual elements from the prior art using only Appellant's disclosure and claim as a roadmap, an exercise in impermissible hindsight").

If you have questions, or if you would like additional information to prepare for the interview, please feel free to call me.

Best regards,



Jeff Armstrong
312-913-2104 (office)

Reexamination	**Application/Control No.** 90013959	**Applicant(s)/Patent Under Reexamination** 9213357
	Certificate Date	**Certificate Number**

Requester Correspondence Address: ☐ **Patent Owner** ☒ **Third Party**
MR. CHRISTOPHER JOHN ROURK JACKSON WALKER LLP 2323 ROSS AVENUE SUITE 600 DALLAS, TX 75201

LITIGATION REVIEW ☐	/DE/ (examiner initials)	11/17/2017 (date)
Case Name		Director Initials
Sonos Inc. v. D&MHoldings, Inc., United States District Court		

COPENDING OFFICE PROCEEDINGS	
TYPE OF PROCEEDING	**NUMBER**

	/DAVID ENGLAND/ Primary Examiner.Art Unit 3992

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.
90/013,959	06/16/2017	9213357	04-0401-REEXAM (14-1800-R	9548

107361 7590 10/20/2017

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

EXAMINER	
ENGLAND, DAVID E	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
10/20/2017	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.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

DO NOT USE IN PALM PRINTER

(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

MR. CHRISTOPHER JOHN ROURK

JACKSON WALKER LLP

2323 ROSS AVENUE

SUITE 600

DALLAS, TX 75201

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. *90/013,959*.

PATENT NO. *9213357*.

ART UNIT *3992*.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

PTOL-465 (Rev.07-04)

David E. England

Primary Examiner

Art Unit: 3992

Office Action in Ex Parte Reexamination	Control No. 90/013,959	Patent Under Reexamination 9213357	
	Examiner DAVID ENGLAND	Art Unit 3992	AIA (First Inventor to File) Status No

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

a. ☒ Responsive to the communication(s) filed on *06/16/2017* .
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

b. ☐ This action is made FINAL.

c. ☐ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire *2* month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892.
2. ☒ Information Disclosure Statement, PTO/SB/08.
3. ☐ Interview Summary, PTO-474.
4. ☐ _____.

Part II SUMMARY OF ACTION

1a. ☒ Claims *9-12 and 19* are subject to reexamination.
1b. ☒ Claims *1-8,13-18 and 20* are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☐ Claims _____ are patentable and/or confirmed.
4. ☒ Claims *9-12,19* are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
   1 ☐ been received.
   2 ☐ not been received.
   3 ☐ been filed in Application No. _____ .
   4 ☐ been filed in reexamination Control No. _____.
   5 ☐ been received by the International Bureau in PCT application No. _____.
   * See the attached detailed Office action for a list of the certified copies not received.
9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate 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.
10. ☐ Other: _____

cc: Requester (if third party requester)

DETAILED EX PARTE REEXAMINATION NON-FINAL OFFICE ACTION

I. INTRODUCTION

This is a Non-Final Office Action on the merits in the *Ex Parte* Reexamination of claims 9, 10, 11, 12, and 19 of US Patent No. US 9,213,357 to Millington, hereinafter "the '357 Patent".

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

A. References Cited in this Office Action

1. The prior art patents and/or printed publications, hereinafter "the references", which have been submitted 08/22/2014, have been considered and are relied upon in this Office Action are relisted as follows.

a. U.S. 9,195,258 to Nicholas A. J. Millington, filed February 20, 2014, issued November 24, 2015 (hereinafter "the '258 Patent");

b. The MP3 and Internet Audio Handbook, Brace Fries and Marty Fries, TeamCom Books (2000) (hereinafter the "Handbook");

c. U.S. 6,611,537 to Edens et al., filed May 15, 1998, issued August 26, 2003 (hereinafter "Edens");

d. U.S. 2004/0252400 to Blank et al., filed June 13, 2003, published December 16, 2004 (hereinafter "Blank");

e. U.S. 2002/015003 to Gray et al., filed April 17, 2001, published October 17, 2002 (hereinafter "Gray");

f. Admitted Prior Art (APA) in the '357 Patent and other related Sonos patents (hereinafter the "SONOS APA").

II. CLAIM INTERPRETATION

2. During examination, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims. See MPEP §2111, MPEP §2111.01 and *In re Yamamoto et al.*, 222 USPQ 934 (Fed. Cir. 1984). Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification. See MPEP 2111.01(I). It is further noted it is improper to import claim limitations from the specification, i.e., a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment. See MPEP 2111.01(II). Therefore, unless one of the exceptions applies below, Examiners will interpret the limitations of the claims using the broadest reasonable interpretation.

3. As noted in the Order of this current application, the 3PR makes specific mention of two specific limitations, within the limitation which is the basis of the SNQ, which require attention in determining what their BRI encompasses, pp. 24 - 28 of the Request, limitations "independently clocked" and "playback timing information".

"independently clocked"

4. The 3PR has pointed out that the limitation of "independently clocked" could have multiple meanings, and because of the PO's concurrent litigation, could also encompass syncronized clocks, see p. 26 of the Request. When reviewing the IDS for this information one sees "Potter Aderson & Corroon LLP, Suplemental opening Breif on Claims Construction,

3/3/2017". When looking for this document, it is not found within the submission of the IDS and therefore can not be specifically considered. However, under further envestegation, the Examiner has come across how the Courts have construde the limitation as found in the Litigation Search acompanied with this action. The courts have stated that the limitation "independently clocked", under BRI, is interpreted as "operating in accordance with their own respective clocks during synchronous playback.", see page 9-10. Furthermore, as closely interpreted by the Examiner under BRI, the interpretation of "independently clocked" could also be that the clocks of each device is run under the devices own power, (i.e., the master device does not run the other device's clocks, the master device merely sets a sync point).

"playback timing information"

5. As pointed out by the 3PR, there appear to be two specific contructions for this limitation. It is said that Sonos proposed a contructions for "playback timing information" of "information indicating when the audio information [content] is to be played back", (construction 1). D&M in the Concurrent Litigation was said to construde the claims under BRI to mean "a series of time values, associated with an audio work divided into blocks of information, each indicating when one of the clocks of audio information should be played by the device", (construction 2). It would appear that "construction 1" is the broadest of the two specifically stated. It is said that Figures 2- 4 depict playback timing information. Though these figures depict more than what is claimed, it is seen multiple times thoughtout the specification that the device "provide audio and playback timing information for the synchrony group to enable a master device and slave devices to play the audio program synchronously", (e.g., Col. 8, lines

61-66). As stated in column 11, lines 15 et seq., "FIG. 4, the audio and playback timing information is in the form of a series of frames, **with each frame having a time stamp**." Therefore, the BRI of "playback timing information" could merely be a type of time stamp.

III. REJECTIONS

A. Relevant Statutes – Claim Rejections

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.

1. Claim Rejections - Nonstatutory Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d

937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

2. Claim Rejections - 35 USC § 103

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 of this title, 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.

B. Detailed Analysis of the Rejection

The Examiner will use the shorthand notation of "1:1-5" for Column 1, lines 1-5.

DOUBLE PATENTING REJECTOIN

Claim 9 of **US Patent 9,213,357, under reexamination, hereinafter "the '357 Patent",** is rejected on the ground of nonstatutory double patenting as being unpatentable over claim 11 of the '258 Patent in view of the Handbook.

Although the claims at issue are not identical, they are not patentably distinct from each other for the reasoning in the claim chart below.

The '258 Patent shares the same, single inventor as requested '357 Patent and was neither cited, nor applied. The '357 Patent is part of a very large family of patents with multiple continuity chains all related to a provisional application, 60/490,768, filed July 28th, 2003.

'357 Patent (Patent under reexamination)	**'258 Patent**
Claim 9. A first playback device comprising:	Claim 11. A system comprising:
one or more processors; a network interface; and	a plurality of zone players that are communicatively coupled via at least a local area network (LAN) with a plurality of controllers, wherein:
tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:	each of the plurality of controllers is configured to provide control information to any one of the plurality of zone players via the LAN; and each of the plurality of zone players is configured to
receive, via the network interface from a network device configured to control the first	(a) receive control information from any one of the plurality of controllers via the LAN, wherein

playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information;	the received control information comprises a direction for the zone player to enter into a synchrony group with at least one other zone player of the plurality of zone players, **HANDBOOK** **(It is seen that the claim does not specifically state the control information having identical data within it. However, it is well known, and common practice, to have a device download or stream an audio file, i.e., music file, to a device from a server on the internet, i.e., another LAN with music files connected to the internet that a user can download music from. This would mean the device would have to have the address to the server to retrieve the music file and then download or "obtain" the music file. Furthermore, it is seen in the specification that the "control information" could have enabled the audio information channel device 23 to provide audio and playback timing information to the group, e.g., 8:19 et seq. Though not specifically claimed as such, it does shed light that it could have been obvious to one skilled in the art at the time the invention was made to have other audio information separate or with the control information. Furthermore, the Handbook discloses such a step, (e.g., pp. 17 – 22 et seq.).**
(ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and (iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the	(b) in response to the direction, enter into the synchrony group with the at least one other zone player of the plurality of zone players, wherein in the synchrony group, the zone player and the at least one other zone player are configured to play back audio in synchrony based at least in part on (b-i) audio content, (b-ii) playback timing information associated with the audio content, wherein the playback timing information is generated by and transmitted from

device clock information of the first playback device to play back the audio information, wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.	one of the zone player or the at least one other zone player to the other of the zone player or the at least one other zone player and (b-iii) clock time information for the one of the zone player or the at least one other zone player, wherein the clock time information is generated by and transmitted from the one of the zone player or the at least one other zone player to the other of the zone player or the at least one other zone player, wherein the zone players in the synchrony group remain independently clocked while playing back audio in synchrony, and (c) transmit status information to at least one of the plurality of controllers via the LAN, wherein the status information comprises an indication of a status of the synchrony group.

REJECTION UNDER 35 U.S.C. 103(a)

1. Claims **9, 10, 11, 12, and 19 are** rejected under **pre-AIA 35 U.S.C. 103(a)** as being unpatentable over U.S. **Edens in view of the Handbook and in further view of Sonos APA**.

RE: Claim 9

A first playback device comprising: one or more processors; a network interface; and tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

Edens discloses a multimedia PC 170, which can be "used to control devices on logical ring network 120, as well as to transmit and receive digital media to/from other network

devices." Edens at 14:41-43. The other network devices can include other multimedia PCs that are playing back audio in synchrony. In addition, surround sound amplifiers/speakers 153-158 are networked audio devices that could be implemented with PC functionality similar to multimedia PC 170, see Edens at 14:64-67 ("by adding devices of greater complexity, particularly CPU-based devices controlled by software or firmware, the possibilities are virtually endless" for controlling devices in the system of Edens.). Edens also discloses a multimedia/data viewer (MDV) 5100, which is a portable interface and display device that can act as a remote control or interface for network devices or as a multimedia/data playback device. In particular, MDV 5100 includes CPU 5102, 10 Base-T Ethernet connection 5176, and a high quality audio subsystem that includes stereo A/D 5122 and D/A 5124 (using Crystal Semiconductor 5331 and 4331 components, respectively), which supports a 44.1 kHz sample rate with 18-bit audiophile sampling. 108:62-110:4. Edens discloses tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback to perform functions, such as in multimedia PC 170, a CPU-based speaker device controlled by software or firmware, or MDV 5100, (e.g., 14:64 – 67 & 109:30-32 "*64MB KM64000 flash memory 5106 stores the operating system and applications software for multimedia/ data viewer 5100.*").

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and after receiving the

control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information;

Edens discloses multiple ways for the playback devices of Edens (PC 170, a CPU-based speaker device or MDV 5100) to receive control information via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over the LAN. In one embodiment, the playback devices of Edens "could be controlled by respective remote control/interface/monitor devices 190 and 195 (which could range from simple remote controls to complex controllers with large LCD screens capable of viewing computer graphics images, MPEG2 video, etc.)," (e.g., 14:19-23). In another embodiment, "multimedia PC 170 could be used to control devices on logical ring network 120, as well as to transmit and receive digital media to/from other network devices", (e.g., 14:42-44). Edens discloses accessing a URL over the Internet for information required by a playback device of Eden for operational purposes, (e.g., 46:56-60, "*Other interested devices can read this information for subsequent use in communicating directly with a particular device and/or obtaining additional information about a device from an external resource (e.g., the Internet via a URL pointer"*), and 47:47-54, "*As will be apparent to one reasonably skilled in the art, many different data structures (e.g., a linked list of objects) and combinations of RAM/ROM/registers can be employed to accommodate the various types of data contained within the configuration and code control block, as well as any other information stored in a network device's local memory and I/O address space, including 'pointers' to external information.*". A person having ordinary skill in the art would recognize that URL pointers could be used to obtain audio data, as it was widely known by the Critical Date of the '357 Patent to obtain audio data from a remote

source over the Internet. As such, it is seen specifically that the Handbook specifically teaches accessing audio data from different websites to have either downloaded or streamed to a requesting computer and have forwarded to other devices in a smaller network, (e.g., pp.17 – 22 et seq.). It is obvious that once a user knowns the location of the audio content they wish to listen to, they have the ability to download it in the multiple ways discussed above and in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the Handbook with Eden for similar reasons stated above, herein and in the double patenting rejection.

(ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and

Edens discloses at 10:9-18 that "*one of the competing devices is elected the network clock device to which all other devices are then synchronized. By synchronizing all network devices to a single reference clock, and providing fixed frames of information propagating around the network at consistent time intervals (44.1 kHz "frame rates" in one embodiment, to enable device synchronization to the CD audio sample rate), the logical ring network ensures that information always will propagate from one device to another at consistent time intervals*". Edens uses frames of data that include the "frame header," which is playback timing information that is used to synchronize digital media streams such as CD audio or MPEG (audio information), (e.g., Eden 27:1-5 et seq., "One of these special markers, the 'frame header' (which actually comprises 2 symbols), is used to synchronize all other devices to the network

clock device at a rate useful for synchronizing digital media streams, such as CD audio or MPEG video,"). Edens transmits device clock **information** of the first playback device (acting as network clock device) using a TIME MARK system command with "time of day" specified in the timestamp field, (e.g., Edens at 51:38-56, "*In one embodiment, the network clock device transmits this 'time of day' reference by first broadcasting a TIME MARK system command with the 'time of day' specified in the Timestamp field, which indicates to interested network devices that such 'time of day' will occur upon receipt of the next 'WK' frame header. At the appropriate time, the network clock device then substitutes the Time Sync ('WK') frame header (in lieu of the far more common Clock Sync ('JK') frame header) to 'mark' the previously specified time of day. It should be noted that this "time of day" is a very accurate relative time marker. Although it is received at slightly different times by network devices due to propagation delays along the logical ring network, these relative time differences remain constant due to the synchronous nature of the logical ring network, Moreover, in one embodiment, the delay does not exceed one (44.1 kHz audio sample) frame time. The 'sub-frame' field of the Timestamp therefore is set to zero in this embodiment,*").

Also, see Edens at 10:58-66 ("*In addition to 'frame header' markers that synchronize devices to a master clock, these frames contain two independent streams—a 'data stream' for the distribution of real-time continuous digital media streams, as well as asynchronous data, and a 'system command stream' for the distribution of 'system commands,' which are used primarily for network initialization and auto-configuration of network devices, as well as basic switching of digital media streams*"). Any one of the playback devices of Edens can serve as the network clock device. See Edens at 26:33-46 ("*In one embodiment, at least one device on a logical ring*

network must be capable of acting as the network clock device, typically in addition to performing its 'normal' function (e.g., CD player). During network initialization, a clock arbitration process determines which device (among those capable of acting as the network clock device) will be deemed the network clock device. In other embodiments, the network clock device could be predetermined— e.g., via a user-settable switch. Once the network clock device has been selected, all other devices are synchronized to the network clock device. The precise details of the network initialization process, and the manner in which devices are synchronized to the network clock device, are discussed in greater detail below.").

(iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information,

The synchronous data can include digital stereo audio having left channel and right channel data, which can be routed to one or more of the audio devices on the network. See Edens at; 24:57-25:2 ("*As noted above, and as will be explained in greater detail below, network devices on a logical ring network of the present invention are synchronized to one another. . . As will be explained below, this* ***low level*** *device* ***synchronization*** *greatly* ***facilitates*** *the* ***synchronization*** *of audio and video sources, audio sources received by multiple speakers, and many other media synchronization requirements.*"); 31:22-36, 52:66-53:10 ("*As each frame propagates around the default network path (or alternate path) of the logic ring networks, the CD player would overwrite nibbles 10-15 and 74-79 with the respective (left and right channel) source digital audio streams.*") As seen in different areas of Edens, once a device becomes the

"network clock" all other devices synchronize to that clock, e.g., 66:37 et seq., Abstract, and 10:8 – 22, "An arbitration process occurs automatically upon network **initialization, and one of the competing devices** is elected the **network clock device to which all other devices are then synchronized**. By **synchronizing all network devices to a single reference clock**, and providing fixed frames of information propagating around the network at consistent time intervals (44.1 kHz "frame rates" in one embodiment, to enable device synchronization to the CD audio sample rate), the logical ring network ensures that information always will propagate from one device to another at consistent time intervals, also see Edens 26:32 – et seq. Additionally, the Timestamp field "time of day" mechanism can also be used to determine when to play back the audio information in synchrony. See Edens at 56:9-14 ("*In addition, the controller may use the "Timestamp" field to cause all network devices receiving a STOP STREAMS system command to stop transmitting their streams simultaneously, at the time specified by the Timestamp field, using the "time of day" mechanism discussed above.*"), 10:4-7 ("*Information can propagate around this logical ring, reaching every device on each revolution around the network. Network devices are full-duplex, transmitting and receiving information simultaneously."*) It is noted that this limitation does not require the second playback device to playback the audio information by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information. That limitation only applies to the first playback device, and as long as the second playback device is playing back the audio information in synchrony with the first playback device while the first playback device uses the playback timing information associated

with the audio information and the device clock information of the first playback device to play back the audio information, then the claim limitation is satisfied.

As such, a person of ordinary skill would have understood that any one of multimedia PC 170, surround sound amplifiers/speakers 153-158 and MDCV 5100 are intelligent playback devices that could playback the audio information, playback timing information associated with the audio information, and device clock information of the first playback device, because Edens discloses that these playback devices could be used to play back audio in synchrony. In addition, to the extent that Edens is considered not to teach this limitation, the Sonos APA at 1:47 to 2:28 acknowledges that it was known to play back audio information in synchrony with first and second playback devices by using the device clock information of the first playback device to play back the audio information, which inherently requires playback timing information associated with the audio information. It would be obvious to a person having ordinary skill in the art to use the Sonos APA with the system of Edens, because both Edens and the Sonos APA are directed to networked audio devices that play back audio in synchrony, and the Sonos APA would allow Edens to utilize other communications media than the synchronous logical ring network, because it teaches that the timing functionality can be provided by a network that is compliant with RFC 1305 or SNTP.

wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

Edens discloses that these network devices can each be capable of acting as a "clock" device and can arbitrate for election as the "network clock" device. Edens at 24:56-63 ("*As noted above, and as will be explained in greater detail below, network devices on a logical ring*

network of the present invention are synchronized to one another. This synchronization occurs upon initialization of the logical ring network, during which each device capable of acting as a "clock" device arbitrates for election as the "network clock" device."). Independent clocking is also disclosed by virtue of the network clock selection process between independently clocked devices, only one of which is selected as the network clock. See Edens at 48:66-49:12 ("*To initiate the network clock device arbitration process, each 'clock-capable' network device immediately broadcasts repeated CLOCK ID system commands (with its own Device ID in the source address field) 1004. Because the logical ring network is not yet synchronized to a network clock device, each such device ignores all received information other than CLOCK ID system commands (i.e., resynchronizing to each received frame header). Upon receiving a CLOCK ID system command, it compares the received 'source' Device ID with its own Device ID 1006. The 'clock-capable' network device having the highest Device ID will win the arbitration. As will become apparent, this arbitration process will be decided very quickly— i.e., in a single 'revolution' of a system command around the default network path of the logical ring network.*") As such, a person of ordinary skill would have understood that anyone of multimedia PC 170, surround sound amplifiers/speakers 153-158 and MDCV 5100 are intelligent playback devices that remain independently clocked during synchronous playback of the audio information, because they would have multiple clocks, and would operate in accordance with their own respective clocks during synchronous playback.

In addition, the Sonos APA discloses that playback devices can remain independently clocked during synchronous playback of audio information, see '357 Patent at 2:21-27 ("*When an audio playback device converts the digital audio information from digital to analog form, it*

does so using a clock that provides timing information. Generally, the audio playback devices that are being developed have independent clocks, and, if they are not clocking at precisely the same rate, the audio playback provided by the various devices can get out of synchronization,"). Thus, if the independent clocks of the audio playback devices are clocking at precisely the same rate by design, or if they are synchronized, then the audio playback provided by the various devices remains in synchronization. Furthermore, as closely interpreted by the Examiner under BRI, the interpretation of "independently clocked" could also be that the clocks of each device is run under the devices own power, (i.e., the master device does not run the other device's clocks, the master device merely sets a sync point). Therefore, Edens would start the synchronization process and the devices in the network would run the clock from the sync point as received from the master clock. Thus it would have been obvious to one of ordinary skill in the art to combine Sonos APA with Edens because Edens merely lacked the explanation of the well-known and understood notion of devices running their clocks independent of each other as stated by Sonos APA. Furthermore, the problem of synchronization of the independently clocked devices of Sonos APA is seen to be remedied by Edens' ability to synchronize the devices on its network much like the '357 Patent.

RE: Claim 10

> **The first play back device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to: generate the playback timing information associated with the audio information; and**

The program instructions of the first playback device of Edens (PC 170, a CPU-based speaker device or MDV 5100) cause the first playback device to generate the playback timing information associated with the audio information, such as by generating the frame header. See Edens at 27:1-5 ("*One of these special markers, the 'frame header' (which actually comprises 2 symbols), is used to synchronize all other devices to the network clock device at a rate useful for synchronizing digital media streams, such as CD audio or MPEG video.*"). A person of ordinary skill would have understood that this disclosure from Edens was the claimed program instructions that, when executed by the one or more processors, further caused the first playback device to generate the playback timing information associated with the audio information, because the generation of the frame header could have been accomplished in a device such as multimedia PC 170 or other playback devices of Edens, such as when that playback device was the network clock device and also the device that was obtaining audio data from outside of the network and providing it to other playback devices of Edens.

generate the device clock information of the first playback device.

The program instructions of the playback devices of Edens (PC 170, a CPU-based speaker device or MDV 5100) cause the associated playback device to generate the device clock information of the first playback device, such as by generating the TIME MARK system command with "time of day" specified in the timestamp field. See Edens at 51:38~56 ("*In one embodiment, the network clock device transmits this 'time of day' reference by first broadcasting a TIME MARK system command with the 'time of day' specified in the Timestamp field, which indicates to interested network devices that such 'time of day' will occur upon receipt of the next 'WK' frame header. At the appropriate time, the network clock device then substitutes the Time*

Sync ('WK') frame header (in lieu of the far more common Clock Sync (' JK') frame header) to 'mark' the previously specified time of day. It should be noted that this "time of day" is a very' accurate relative time marker. Although it is received at slightly different times by network devices due to propagation delays along the logical ring network, these relative time differences remain constant due to the synchronous nature of the logical ring network. Moreover, in one embodiment, the delay does not exceed one (44.1 kHz audio sample) frame time. The 'sub-frame' field of the Timestamp therefore is set to zero in this embodiment.").

A person of ordinary skill would have understood that this disclosure from Edens was the claimed program instructions that, when executed by the one or more processors, further caused the first playback device to generate the device clock information of the first playback device, because the generation of the time of day, time sync and clock sync data could have been accomplished in a device such as multimedia PC 170 or other playback devices of Edens, such as when that playback device was the network clock device and also the device that was obtaining audio data from outside of the network and providing it to other playback devices of Edens.

RE: Claim 11

The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

Edens discloses that the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information. No limitations are provided in regards to the format, substance or type of instructions, such that any

instruction for the first playback device and the second playback device to playback audio information meets this limitation under the broadest reasonable interpretation.

Edens discloses that network devices such as the playback devices can send commands to one another, pursuant to virtually any protocol, which would include simple playback protocols such as a "play" command. See Edens at 11:26-30 ("*Network devices also can utilize channels of the data stream to send custom commands to one another, including control information, pursuant to virtually any protocol known to such devices*").

Edens discloses that audio data can be played by surround sound amplifier/speaker devices 153-158, which can be controlled by-control devices 190 and 195, which inherently requires instructions for the first playback device and the second playback device (e.g. two or more of surround sound amplifiers/speaker devices 153-158 (which can be CPU-based devices augmented with hardware and software as disclosed at 14:64-67) to playback audio information. See Edens at 14:11-23 ("*The audio extracted by MPEG2 decoder 161 could be transmitted back onto logical ring network 120 and played by left 167 and right 168 amplifier/speakers. The audio extracted by MPEG2 decoder 151 could be transmitted back onto logical ring network 120, processed by DSP (e.g., AC-3 surround sound decoder) 152, and then transmitted back onto logical ring network 120 and played by surround sound amplifier/speakers 153, 154, 156, 157 and 158. The systems in rooms 106 and 102 could be controlled by respective remote control/interface/monitor devices 190 and 195 (which could range from simple remote controls to complex controllers with large LCD screens capable of viewing computer graphics images, MPEG2 video, etc.*").

A controller of Edens can also send a START STREAMS command to networked audio devices to start playback. See Edens at 56:25-41 ("*Finally, having assigned all reallocated network nibble streams to the relevant network devices, the controller could restart, those streams simultaneously by sending the START STREAMS system command to such devices. The START STREAMS system command is identical to the STOP STREAMS system command discussed above, except that devices start (rather than stop) transmitting/receiving data at the time indicated by the Timestamp field. Thus, a controller can accommodate virtually any programming change a user makes (typically via some form of remote control device) with respect to the source (e.g., DSS satellite receiver, DVD player, CD player, etc.) or destination (e.g., particular speakers, televisions/monitors, etc.) of an audio or video program, or other form of data*."). The start/stop streams commands applies to each device that is receiving the information and then further transmitting it on to another device. 10:4-7 ("*Information can propagate around this logical ring, reaching every device on each revolution around the network. Network devices are full-duplex, transmitting and receiving information simultaneously*").

A person of ordinary- skill would have understood that this disclosure from Edens was the claimed control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information, because the START STREAMS command was an instruction for playing back the audio content that could have been generated by a controlling multimedia PC, MDV 5100 or other control device of Edens, and would have been received and retransmitted by each playback device of Edens that was playing back the audio in synchrony.

RE: Claim 12

The first device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

Edens discloses that, the first and second playback devices are members of a synchrony group, which is any two devices that are synchronized in some manner under the broadest reasonable construction of the term "synchrony group." For example, Edens explicitly discloses synchronized playback between stereo speaker devices, and also **between** multiple sets of stereo speakers. 52:66-53:10 ("*As each frame propagates around the default network path (or alternate path) of the logic ring networks, the CD player would overwrite nibbles 10-15 and 74-79 with the respective (left and right channel) source digital audio streams. Other network devices would merely pass those nibbles of each frame along to the next network device on the logical ring network.* ***One or more*** *"left" speaker network devices (e.g., in different rooms of a house) would extract nibbles 10-15 of each frame and play that left channel digital audio stream. Similarly,* ***one or more*** *"right" speaker network devices would extract nibbles 74-79 said play that right channel digital audio stream.*").

A person of ordinary skill would have understood that this disclosure from Edens demonstrated that multiple playback devices of Edens could play back the audio in synchrony, which would make them members of a "synchrony group" under the **BRI.** See also Edens at 10:4-7; 11:13-18; 14:24-40; 27:1-5; 32:28-52; 56:9-14 and 104:7-15.

transmit, to the network device, status information that comprises a status of the synchrony group.

Edens discloses transmit status information to the network device that comprises a status of the synchrony group. The broadest reasonable interpretation of the term “status information” includes any kind of status information associated with the synchrony group, including any device that is capable of communicating with other devices, such as by responding to a MASTER RESET, CLOCK. ID, SCAN RESET, SCAN REQUEST, SCAN REPLY and SCAN INITIATE system command, which are used to reset and initialize network devices, by communicating with other network devices and read/write one another's device-specific information via the MESSAGE, READ, WRITE, SET and GET system commands, or by responding to a data stream channel reallocation and control via the TALK ASSIGN, TALK QUERY, LISTEN ASSIGN, LISTEN QUERY, START STREAMS, STOP STREAMS, and QUERY STREAMS system commands. See Table V, 40:45 to 45:20.

Edens further discloses, in column 35 et seq., the system command stream is used primarily for initialization of configuration of devices on a logical ring network. Part of the message format specifically states a "status" byte, (e.g., 36:25 - 53, "*The next to last byte of a system command is the "status" byte. Network devices set the LSB or "acknowledge" bit of this byte in a received system command to acknowledge receipt of the system command. Because system commands propagate back to the network device that initiated them before being removed, the initiating network device can inspect the acknowledge bit and know whether the target device received the system command. The "next-to-LSB" (i.e., bit 1) of the status byte is undefined in this embodiment. As will be discussed below, most system commands that are addressed directly to a network device (i.e., not broadcast) require an acknowledgement. The 6 MSBs of the status byte*

can be used by a network device as a "sequence number" to track system commands it initiates…").

A person of ordinary skill would have understood that this disclosure from Edens was the claimed transmission of status information that, comprises a status of the synchrony group to the network, device, because device-specific information obtained via the MESSAGE, READ, WRITE, SET and GET system commands, or from a response to a data stream channel reallocation and control via the TALK ASSIGN, TALK QUERY, LISTEN ASSIGN, LISTEN QUERY, START STREAMS, STOP STREAMS, and QUERY STREAMS provided status information from a member of a synchrony group, which meets the claim limitation under the BRI.

RE: Claim 19

> **The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.**

Edens discloses multiple ways for the playback devices of Edens (PC 170, a CPU-based speaker device or MDV 5100) to receive control information via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over the LAN. In one embodiment, the playback devices of Edens "could be controlled by respective remote control/interface/monitor devices 190 and 195 (which

could range from simple remote controls to complex controllers with large LCD screens capable of viewing computer graphics images, MPEG2 video, etc.)," (e.g., 14:19-23). In another embodiment, "multimedia PC 170 could be used to control devices on logical ring network 120, as well as to transmit and receive digital media to/from other network devices", (e.g., 14:42-44). Edens discloses accessing a URL over the Internet for information required by a playback device of Eden for operational purposes, (e.g., 46:56-60, "*Other interested devices can read this information for subsequent use in communicating directly with a particular device and/or obtaining additional information about a device from an external resource (e.g., the Internet via a URL pointer"*), and 47:47-54, "*As will be apparent to one reasonably skilled in the art, many different data structures (e.g., a linked list of objects) and combinations of RAM/ROM/registers can be employed to accommodate the various types of data contained within the configuration and code control block, as well as any other information stored in a network device's local memory and I/O address space, including 'pointers' to external information.*". A person having ordinary skill in the art would recognize that URL pointers could be used to obtain audio data, as it was widely known by the Critical Date of the '357 Patent to obtain audio data from a remote source over the Internet. As such, it is seen specifically that the Handbook specifically teaches accessing audio data from different websites to have either downloaded or streamed to a requesting computer and have forwarded to other devices in a smaller network, (e.g., pp.17 – 22 et seq.). Furthermore, the Handbook discloses in multiple other areas that PCs could be used as playback devices and included the ability to obtain audio information from a source outside the LAN. See the Handbook, pages see pages, 28-34, 66-84, 109-116, 123-154, 243-261. It is obvious that once a user knowns the location of the audio content they wish to listen to, they

have the ability to download it in the multiple ways discussed above and in the prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the Handbook with Eden for similar reasons stated above, herein and in the double patenting rejection.

2. Claims **9, 10, 11, 12, and 19 are** rejected under **pre-AIA 35 U.S.C. 103(a)** as being unpatentable over U.S. **Blank in view of the Gray and in further view of Sonos APA**.

RE: Claim 9

A first playback device comprising: one or more processors; a network interface; and tangible, non-transitory computer-readable memory comprising program instructions that, when executed by the one or more processors, cause the first playback device to:

Blank discloses a media synch player 110 that is a playback device, (e.g., ¶ 0029, "*In operation, the media synch players 110 each generate a content stream such as video or audiovisual data in synchrony at the behest of the live playback system control console 125. Synchronism is derived from the time server 120, facilitating orchestration of the content provided by the media synch players 110. The system control console 125 and the media synch players 110 are slaved to the time server 120. As such, the system control console 125 can transmit a start time t+d for the media synch players 110 to start providing content from media files 210 (FIG. 2), and the media synch players 110 are synchronized with respect to this start*

time." See also [0026], [0034], [0036]-[0041], [0044]-[0047], [0052]-[0059], [0065]-[0071], [0077]-[0093].

Gray discloses a management system 212 at [0036]-[Q037] that can receive audio data over the Internet for use with audio system 216, and that management system can be a playback device that is integral with audio system 216. A person of ordinary skill in the art would understand that management system 212 can be implemented as part of one or more media synch player 110.

A person of ordinary skill in the art. would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and would understand that they could be implemented in conjunction with commonplace PC functionality disclosed in the Handbook.

receive, via the network interface from a network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN), control information comprising an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN; and after receiving the control information, (i) obtain, via the network interface from the audio information source outside of the LAN, the audio information;

Blank discloses that recorded media that are distributed over a wide geographic area can be used for a multimedia presentation that requires synchronization of multiple displays at, (e.g., ¶ 0008). Blank discloses that live playback system control console 125 at ¶ 0054 that provides control signals to interface 220 of media synch players 110, and that these control signals can

include commands to "play" and "get file." Thus, at least live playback system control console 125 is a "*network device configured to control the first playback device and communicatively coupled to the first playback device over a local area network (LAN).*", (e.g., ¶ 0054, "*In the block 405, control signals from the control console 125 are received by the interface 220. In one embodiment, the control signals may comprise, for example, one of: play, pause, stop, seek to time, get file and show images.*"). Blank discloses that media files 210 can be stored at a media storage location for each media synch player 110, or that is shared by two or more media synch players 110 at ¶ 0037. Blank discloses that the disclosed system elements can be connected over a WAN or the Internet at [0023], Blank incorporates U.S. patent application Ser. No. 09/836,834 (Published Application No. 2002/0150053 to Gray et a., hereinafter "Gray") by reference at [0042] and [0045], Gray discloses communication of multimedia packets 304 from a multimedia source 301 to a multimedia sink 302 over heterogeneous networks 303, which inherently requires an address identifying a network location of audio information outside of a LAN for a multimedia sink 302 on a local area network 313. See, Gray at Fig. 1, ¶¶ 0053, **0059**, 0061).

Gray discloses at ¶¶ 0036 – 0037 that management system 212 can receive audio data over the Internet for use with audio system 216, and that management system can be a playback device that is integral with audio system 216. A person of ordinary skill in the art would understand that management system 212 can be implemented as part of one or more media synch player 110.

A person of ordinary skill in the art would recognize that streaming audio content from a source outside of the LAN could be accomplished using software programs such as the Windows Media Player, as disclosed at [0037] of Blank. A person having ordinary skill in the art would

thus understand that live playback system control console 125 can provide control information to a media synch player that comprises an address identifying a network location of audio information available at an audio information source, wherein the audio information source is outside of the LAN, as disclosed in Gray. As such, a person having ordinary skill in the art would understand that audio data that is received over the Internet by the system of Gray can be stored as a media file 210 of a media synch player 110 of Blank. It was common as of the critical date of the '357 Patent (April 1, 2003) for users to obtain content over the Internet from sources outside of a user's LAN and to store that content on a personal computer or other playback device. Also See, e.g., the Handbook.

(ii) transmit, via the network interface of the first playback device to a second playback device, the audio information, playback timing information associated with the audio information, and device clock information of the first playback device; and

Blank discloses clock module 212 of a media synch player 110 that can be slaved to another clocking system at ¶ 0038, Blank also discloses the use of a time server 120 at ¶ 0029 and ¶¶ 0044-0051. A person of ordinary skill in the art would recognize that the time server 120 could be located on a first media synch player 110, and could provide the master clock that is used to provide the playback timing information, (e.g., MPEP 2144.04 V.B. "Making Integral" *In re Larson,* 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965), i.e., the courts found that making one means integral with another means, among other reasons, "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice."). In this instance, taking to computers and housing them in "one

box" would be an "obvious engineering choice". Thusly, the time server 120 would then transmit clock information to a second media synch players 110, to allow it to acquire lock with a clock contained in time server 120. See ¶ 0048 of Blank.

As discussed below, the first media synch player 110 can obtain the audio information and provide it to the second media synch player 110 using Windows file sharing, and can then provide playback timing information by either 1) hosting live playback system control console 125 and transmitting a play command to the second media synch player 110, for "playback timing information" construction 1, or 2) add time stamps to the media data packets at the application layer that are used to control playback timing in accordance with the teachings of Gray, for "playback timing information" construction 2, Time information can also be transmitted from time server 120 to other media synch players 110 to cause them to "speed up or slow" down rendering of clocks 212 in the individual media synch players 110." See [0045] of Blank. Time information that causes other media synch players 110 to speed up or slow down meets the broadest reasonable interpretation of "playback timing information," because it is used to control playback timing.

A person having skill in the art would recognize that live playback system control console 125 can also be implemented on a media synch player 110 with time server 120, and can be used to provide playback timing information to other media synch players 110 as disclosed at [0044] as a time stamp "t" and an indication of a delay "d" that is used to coordinate playback, which satisfies the broadest reasonable interpretation of "playback timing information," because it is used to control playback timing. Therefore, it would have been obvious to combine the devices stated in Blank because of similar reasons stated above and in MPEP 2144.04. Blank

discloses the playback timing information associated with the audio information under construction 1, such as when a start time t+d is generated by a first playback device that is also used to implement system control console 125. See ¶ 0029.

Gray discloses the use of time stamps in multimedia packets at [0062] that are used to control the time that a multimedia packet is to be rendered at, and further discloses at [0069] that the application layer can "maintain the common time reckoning across the devices, calculate the appropriate time stamp, and/or include the time stamp in the multimedia packet." A person of ordinary skill in the art would recognize from this teaching that the application layer on the media synch player 110 that includes a time server 120 could include the time stamp into the multimedia packets of the audio data from media file 210 (that has been obtained from outside the LAN and stored in media file 210) and which is then provided to other media synch players 110 as "playback timing data" for synchronized playback, because that would allow the system of Blank to be implemented on as few as two different devices, and would eliminate the need for a separate time server 120. Gray discloses the playback timing information associated with the audio information under construction 2, such as when the application layer of a media synch player 110 inserts timestamps into frames of audio data, See ¶¶ 0016, 0087, 0089.

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can transmit audio information, playback timing information and clock information to another playback device for synchronous playback.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that it was known to transmit audio information and playback timing information associated with the audio information (for synchronous playback) and device clock information of the first playback device (using RFC 1305 or SNTP), via the network interface of the first playback device to a second playback device. See '357 Patent at 1:47 to 2:28 and the '768 Provisional at pages 1-2. It would be obvious to use the Sonos APA with the system of Blank, because both Blank and the Sonos APA are directed to networked audio devices that playback audio in synchrony, and the Sonos APA would eliminate the need for an additional device for time server 120, because it teaches that the timing functionality can be provided by a playback device.

(iii) play back the audio information in synchrony with the second playback device by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information,

Blank discloses that media synch players 110 play back the audio information in synchrony with each other by using the playback timing information associated with the audio information that is generated by live playback system control consoled 125 and the device clock information of the first playback device (which is used to generate the NTP timing information) to play back the audio information. See ¶¶ [0009], [0010], [0022], [0024], [0025], [0029], [0041], [0043]-[0045], Each media synch player 110 uses the audio information and its own clock information and the playback timing information (the start time of Blank t+d under construction 1, or frame-specific time stamps of Gray under construction 2), but even if the

claims are amended to positively recite the second playback device and to require the second playback device to use the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information. Blank or Blank and Gray disclose that also.

The management systems 212 of Gray can play back the audio information in synchrony with a second management system 212 by using the playback timing information associated with each frame of the audio information and the device clock information of the first playback device to play back the audio information, such as using an application synchronization process in conjunction with the management systems 212. See ¶¶ [0016], [0087], [0089].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other using the playback timing information and clock time information of the first playback device, as discussed above.

It is noted that this limitation does not require the second playback device to playback the audio information by using the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information. That limitation only applies to the first playback device, and as long as the second playback device is playing back the audio information in synchrony with the first playback device while the first playback device uses the playback timing information associated with the audio information and the device clock information of the first playback device to play back the audio information, then the claim limitation is satisfied. It is further noted that the only real

information that is used to play the audio is the audio information and the playback timing information. The "device clock information" is not specifically utilized since all that is needed it that the synchrony uses the playback timing information **associated** with the audio information and the device clock information, i.e., “associated" is not the same as saying "using” the device clock information in actual playing of audio information.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that it was known to transmit audio information and playback timing information associated with the audio information (for synchronous playback) and device clock information of the first playback device (using RFC 1305 or SNTP), via the network interface of the first playback device to a second playback device. See ‘357 Patent at 1:47 to 2:28 and the ‘768 Provisional at pages 1-2. It would be obvious to use the Sonos APA with the system of Blank, because both Blank and the Sonos APA are directed to networked audio devices that playback audio in synchrony, and the Sonos APA would allow Blank to provide the timing functionality on one of the media synch players 110 instead of a dedicated time server 120, thus reducing the need for an additional device.

wherein the first and second playback devices remain independently clocked during synchronous playback of the audio information.

The prior art of Blank and Gray do not explicitly disclose this limitation.

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can remain independently clocked during synchronous playback, at least because PCs contain multiple clocks that can be independent.

To the extent that it is considered that Blank or Gray do not disclose this limitation, the Sonos APA discloses that playback devices can remain independently clocked during synchronous playback of audio information, see '357 Patent at 2:21-27 ("*When an audio playback device converts the digital audio information from digital to analog form, it does so using a clock that provides timing information. Generally, the audio playback devices that are being developed have independent clocks, and, if they are not clocking at precisely the same rate, the audio playback provided by the various devices can get out of synchronization*."). Thus, if the independent clocks of the audio playback devices are clocking at precisely the same rate by design, or if they are synchronized, then the audio playback provided by the various devices remains in synchronization. Furthermore, as closely interpreted by the Examiner under BRI, the interpretation of "independently clocked" could also be that the clocks of each device is run under the devices own power, (i.e., the master device does not run the other device's clocks, the master device merely sets a sync point). Therefore, Blank or Gray would start the synchronization process and the devices in the network would run the clock from the sync point as received from the master clock. Thus it would have been obvious to one of ordinary skill in the art to combine Sonos APA with Blank or Gray because Blank and Gray merely lacked the explanation of the well-known and understood notion of devices running their clocks independent of each other as stated by Sonos APA. Furthermore, the problem of synchronization of the independently clocked devices of Sonos APA is seen to be remedied by Blank and Gray's ability to synchronize the devices on its network much like the '357 Patent.

RE: Claim 10

The first play back device of claim 9, wherein the program instructions, when executed by the one or more processors, further cause the first playback device to: generate the playback timing information associated with the audio information; and

Blank discloses that the software generates the playback timing information associated with the audio information under construction 1, such as when a start time t+d is generated by a first playback device that is also used to implement system control console 125. See ¶ [0029] Gray discloses that the software generates the playback timing information associated with the audio information under construction 2, such as when the application layer of a media synch player 110 inserts timestamps into frames of audio data. See ¶¶ [0016], [0087], [0089]. A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs that use SMPTE or RFC 1305 to generate playback timing information associated with the audio information, under either construction 1 in the form of a "play" command or under construction 2 in the form of frame-specific playback timing information.

generate the device clock information of the first playback device.

Blank discloses that the media synch player 110 software causes the media synch player 110 to generate device clock information of the first playback device, such as by activating the Network Time Protocol module 15. See [0038], [0046]-[0048]. Blank discloses clock module 212 of a media synch player 110 that can be slaved to another clocking system at ¶ 0038, Blank also discloses the use of a time server 120 at ¶ 0029 and ¶¶ 0044-0051. Thusly, the time server

120 would then transmit clock information to a second media synch players 110, to allow it to acquire lock with a clock contained in time server 120. See ¶ 0048 of Blank. Also see rejection of claim 9 above.

RE: Claim 11

The first playback device of claim 9, wherein the control information further comprises one or more instructions for the first playback device and the second playback device to playback audio information.

Blank discloses at [0029] that the "*media synch players 110 each generate a content stream such as video or audiovisual data in synchrony at the behest of the live playback system control console 125. Synchronism is derived from the time server 120, facilitating orchestration of the content provided by the media synch players 110. The system control console 125 and the media synch players 110 are slaved to the time server 120. As such, the system control console 125 can transmit a start time t+d for the media synch players 110 to start providing content from media files 210 (FIG. 2), and the media synch players 110 are synchronized with respect to this start time*." The start time is control information that includes one or more instructions for the first playback device and the second playback device to playback audio information.
See also Blank at [0044] ("*In operation, a time stamp "t" is obtained by each device from the controller 125, which is synchronized with the time server 120. Also included with the time stamp t is a delay indication "d". In combination, these time related components instruct the media synch players 110 on when to render content, available from the media files 210. Essentially, each media synch player 110 will wait to render content until a particular time*

t+d, derived from the time stamp from the controller 125. As such, content from all of the media synch players 110 will be synchronized to the same moment in time—t+d —regardless of when the time synchronization was initiated "), [0056] ("*In a block 410, the media synch players 110 respond to the control signals and provide appropriate output signals via the signal paths 112 to the displays 105. Such may comprise start of synchronized operation of the media synch players 110 and associated displays 105, switching from one media file 210 to another (e.g., get file followed by start), cease operation (e.g., stop), which may include initiation of a predetermined state such as a blank or black display 105, and the like*").

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other in response to a suitable playback command.

RE: Claim 12

The first device of claim 11, wherein the first and second playback devices are members of a synchrony group, and wherein the program instructions, when executed by the one or more processors, further cause the first playback device to:

Blank discloses that media synch players 110 are members of a synchrony group that play back the audio information in synchrony with each other by using the playback timing information associated with the audio information that is generated by live playback system control consoled 125 and the device clock information of the first playback device (which is used

to generate the NTP timing information) to play back the audio information. See ¶¶ [0009], [0010], [0022], [0024], [0025], [0029], [0041], [0043] - [0045].

The management systems 212 of Gray can play back the audio information in synchrony with a second management system 212 in a synchrony group by using the playback timing information associated with each frame of the audio information and the device clock information of the first playback device to play back the audio information, such as using an application synchronization process in conjunction with the management systems 212. See ¶¶ [0016], [0087], [0089].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs, and which can play back audio in synchrony with each other, which would make then members of a synchrony group.

transmit, to the network device, status information that comprises a status of the synchrony group.

Blank discloses that status information that comprises a status of the synchrony group can be displayed in Figures 6 & 7, which shows the status of players **Al, B1** and **Cl,** which are each playing the same audio source ("Fgn_Affair"). See ¶¶ [0064]-[0065].

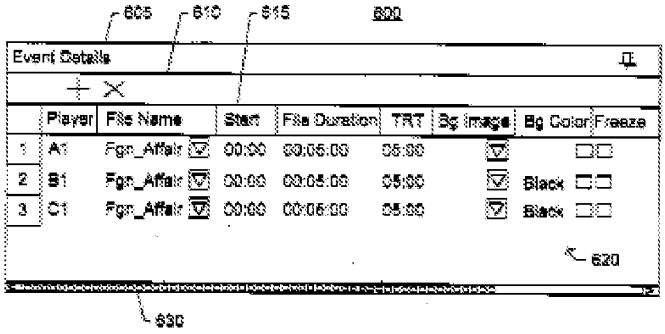


Fig. 6

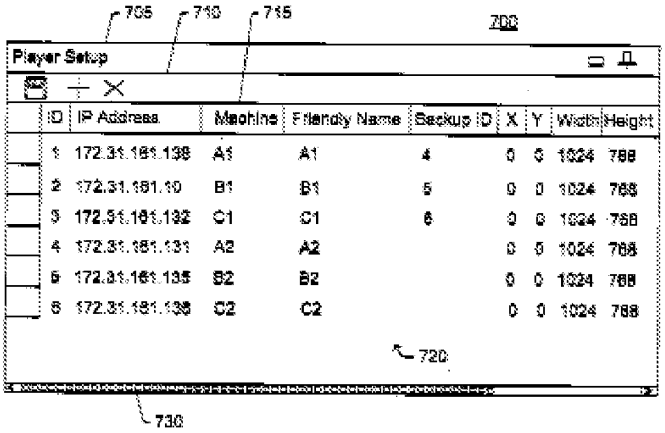


Fig. 7

Blank discloses that status information can be displayed using a player status mode [0070], and that the status information can include a status such as "playing" [0071], See Fig. 9, "player status," which is a "status of the synchrony group" because it is a status of a member of the synchrony group under the broadest reasonable construction of the term:

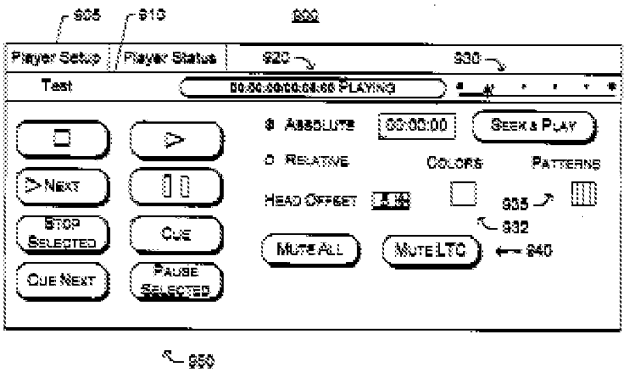


Fig. 9

To the extent that it is considered that Blank does not disclose this limitation, the Sonos APA discloses the existence of discovery protocols that can be used to learn about other components on the network and to establish communication with them, such as the Universal Plug and Play (UPnP) architecture, which defines discovery as the first step in UPnP networking. This allows devices to discover other devices and to exchange information about themselves and/or their services. See U.S. Provisional Application 60/490,768, filed July 28, 2003 (the '768 Provisional), A person of ordinary skill in the art would understand that such discovery protocols would result in the transmission of status information for each device in the synchrony group to a controller device, which could be implemented in conjunction with live playback system control console 125 or other suitable control devices.

RE: Claim 19

The first playback device of claim 9, wherein the audio information source outside of the LAN is an Internet-accessible audio information source, and wherein obtaining, from the audio information source outside of the LAN, the audio information, comprises obtaining the audio information from the Internet-accessible audio information source.

Blank discloses that the system elements can be connected by LANs, WANs or the Internet. See ¶ [0023].

Gray discloses that audio content can be obtained from a remote source over the Internet. See ¶¶ [0035]-[0037], [0041], [0046]-[0048].

A person of ordinary skill in the art would consider the media synch players 110 of Blank or the management system 212 of Gray to be playback devices that could be implemented as PCs or in conjunction with PCs that can obtain audio information from an Internet-accessible source, as disclosed Blank, Gray, Sonos APA, or what is well known and ordinary in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the Handbook with for similar reasons stated above, herein and in the double patenting rejection.

IV. CONCLUSION

A. Submissions

1. Information Disclosure Statement (IDS)

The multiple IDS submissions on 08/31/2017, and the IDS submitted 10/09/2017 was considered as of 10/17/2017. It is to be noted, however, that where patents, publications, and other such items of information are submitted by a party (patent owner or requester) in compliance with the requirements of the rules, the requisite degree of consideration to be given to such information will be limited by the degree to which the party filing the information citation has explained the content and relevance of the information. In instances, where no explanation of citations (items of information) is required and none is provided for an information citation, only a cursory review of that information is required. The examiner need only perform a cursory evaluation of each unexplained item of information, to the extent that he/she needs in order to determine whether he/she will evaluate the item further. If the cursory evaluation reveals the item not to be useful, the examiner may simply stop looking at it. This review may often take the form of considering the documents in the same manner as other documents in Office search files are considered by the Examiner while conducting a search of the prior art in a proper field of search. The initials of the Examiner, in this proceeding, placed adjacent to the citations on the PTO/SB/08A or its equivalent, without an indication in the record to the contrary in the record, do not signify that the information has been considered by the Examiner any further than to the extent noted above. The same degree of consideration was provided for the references merely cited with the request but for which no explanation regarding the content and relevance of the information was provided. See MPEP 609, Chapter 0600, pages

192-193 of pages 1-197 - MPEP Eighth Edition, Revision 8 (July 2010). The examiner notes that due to the unusually large number of references cited, and the absence of any description of the relevance of the references, it should be assumed that only the most cursory review of the cited documents consistent with these guidelines has been performed. If applicant is aware of any information that might be of particular relevance, it should be pointed out in order to insure a higher degree consideration.

2. In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

B. Extension of time

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in ex parte reexamination proceedings are provided for in 37 CFR 1.550(c). See MPEP § 2265.

C. Litigation Reminder

The patent owner is reminded of the continuing responsibility under 37 CFR 1.565(a) to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving in

the '357 Patent throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

D. Amendment in Reexamination Proceedings

Patent owner is notified that any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.530(d) - (j), and must contain any fees required by 37 CFR 1.20(c). See MPEP § 2234 and 2250(IV) for examples to assist in the preparation of proper proposed amendments in reexamination proceedings.

E. Service of Papers

All correspondence related to this ExParte reexamination proceeding should be directed:

By EFS: Registered users may submit via the electronic filing system EFS-Web, at https://efs.uspto.gov/efile/myportal/efs-registered

By Mail to: Mail Stop Ex Parte Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450