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**UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA**

SONOS, INC.,

Plaintiff,

v.

GOOGLE LLC,

Defendant.

Case No. 2:20-cv-00169-JAK
(DFMx)

**SONOS'S ANSWER AND
COUNTERCLAIMS**

JURY TRIAL DEMANDED

TABLE OF CONTENTS

TABLE OF CONTENTS	I
ANSWER.....	1
NATURE OF THE ACTION	1
BACKGROUND	1
COUNTERCLAIMS	10
INTRODUCTION	10
TIMELINE OF RELEVANT DISCLOSURES	13
A. Sonos’s Invention.....	13
B. Motorola’s Patent Application.....	17
C. Mobiplug’s (then Revolv’s and then Nest’s) Patent Application.....	17
D. Google Acquires the Motorola and Revolv Patent Applications and Begins to Morph the Mathews Patent Family.....	20
GOOGLE PROSECUTES THE MATHEWS PATENT FAMILY	21
TIMELINE OF SONOS-GOOGLE NEGOTIATIONS AND LITIGATION AMIDST GOOGLE’S PROSECUTION OF THE MATHEWS PATENT FAMILY	24
A. 2016 Discussions.....	24
B. 2018-2020 Discussions and Sonos’s ITC Litigation	31
C. Google Asserts Mathews ’615 But Fails to Cite Material Information Stemming from These Proceedings in the Mathews ’579 App.....	46
THE UNDISCLOSED REFERENCES ARE MATERIAL TO PATENTABILITY OF MATHEWS ’790 AND MATHEWS ’608	55
A. Mathews ’790.....	55
B. Mathews ’615.....	67

1	C. Mathews '608.....	75
2	COUNT I: DECLARATION OF NON-INFRINGEMENT OF U.S.	
3	PATENT NO. 9,485,790.....	82
4	COUNT II: DECLARATION OF INVALIDITY OF U.S. PATENT NO.	
5	9,485,790.....	82
6	COUNT III: DECLARATION OF UNENFORCEABILITY OF U.S.	
7	PATENT NO. 9,485,790.....	83
8	A. Failure to Disclose Motorola '671 Patent.....	83
9	B. Failure to Disclose Millington '951.....	84
10	COUNT IV: DECLARATION OF NON-INFRINGEMENT OF U.S.	
11	PATENT NO. 12,132,608.....	85
12	COUNT V: DECLARATION OF INVALIDITY OF U.S. PATENT NO.	
13	12,132,608.....	86
14	COUNT VI: DECLARATION OF UNENFORCEABILITY OF U.S.	
15	PATENT NO. 12,132,608.....	86
16	A. Infectious Unenforceability Stemming From Mathews '615.....	87
17	B. Failure to Disclose Motorola '671.....	88
18	C. Failure to Disclose Sonos's Invalidity Contentions and	
19	Allegations of Inequitable Conduct.....	88
20	D. Failure to Disclose Sonos's IPR Petition and Google's	
21	Response.....	90
22	PRAYER FOR RELIEF.....	91
23		
24		
25		
26		
27		
28		

ANSWER

1. Plaintiff Sonos, Inc. (“Sonos” or “Plaintiff”) submits this Answer and Counterclaims to Defendant Google LLC’s (“Google”) Counterclaims for Patent Infringement (“Counterclaims”), and states as follows:

NATURE OF THE ACTION

2. Sonos admits that this action purports to arise under the Patent Act, 35 U.S.C. § 1 *et seq.* Sonos admits that Google asserts United States Patent Nos. 9,485,790 and 12,132,608 against Sonos.

BACKGROUND

3. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the allegations and characterizations contained in Paragraph 3 of the Counterclaims and, on that basis, denies them.

4. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the allegations and characterizations contained in Paragraph 4 of the Counterclaims and, on that basis, denies them.

5. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the allegations and characterizations contained in Paragraph 5 of the Counterclaims and, on that basis, denies them.

6. Sonos denies that “Google’s ’608 and ’790 patents” are for “innovative technologies.” Sonos denies that it is “using” any technology covered by the claims of the ’608 or ’790 Patents. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the remaining allegations and characterizations contained in Paragraph 6 of the Counterclaims and, on that basis, denies them.

7. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the reasons why Google brought its Counterclaims. Sonos denies the remaining allegations of Paragraph 7 of the Counterclaims.

THE PARTIES

8. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the allegations and characterizations contained in Paragraph 8 of the Counterclaims and, on that basis, denies them.

9. Sonos admits that Sonos, Inc. is a Delaware corporation. Sonos denies the remaining allegations of Paragraph 9 of the Counterclaims.

JURISDICTION AND VENUE

10. Sonos admits that this action purports to arise under the patent laws of the United States, Title 35 of the United States Code and that this Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). Sonos denies the remaining allegations of Paragraph 10 of the Counterclaims.

11. For purposes of this action only, Sonos does not challenge personal jurisdiction. Except as expressly admitted, Sonos denies the remaining allegations of Paragraph 11 of the Counterclaims and specifically denies that it has committed acts of infringement.

12. For purposes of this action only, Sonos admits that venue is proper in this District. Except as expressly admitted, Sonos denies the remaining allegations of Paragraph 12 of the Counterclaims and specifically denies that it has committed acts of infringement.

FIRST CAUSE OF ACTION

13. Sonos incorporates by reference each of its responses to paragraphs 1-12 of the Counterclaims set forth above as if fully set forth herein.

14. Sonos denies the allegations in Paragraph 14 of the Counterclaims insofar as they purport to attribute to the '608 Patent anything that is not stated therein. Sonos admits that Exhibit 1 of the Counterclaims purports to be a copy of the '608 Patent. Sonos admits that the '608 Patent is entitled "Apparatus and Method for Seamless Commissioning of Wireless Devices" and that it bears an issuance date of October 29, 2024. Sonos is currently without knowledge or

1 information sufficient to form a belief as to the truth or falsity of the remaining
2 allegations and characterizations contained in Paragraph 14 of the Counterclaims
3 and, on that basis, denies them.

4 15. Sonos is currently without knowledge or information sufficient to
5 form a belief as to the truth or falsity of the allegations and characterizations
6 contained in Paragraph 15 of the Counterclaims and, on that basis, denies them.

7 16. Sonos denies the allegations and characterizations contained in
8 Paragraph 16 of the Counterclaims.

9 17. Sonos denies the allegations and characterizations contained in
10 Paragraph 17 of the Counterclaims and specifically denies it has committed acts of
11 infringement. To the extent Paragraph 17 of the Counterclaims contains
12 conclusions of law, no response is necessary.

13 18. Sonos denies the allegations and characterizations contained in
14 Paragraph 18 of the Counterclaims.

15 19. Sonos denies the allegations and characterizations contained in
16 Paragraph 19 of the Counterclaims and Exhibit 2 and specifically denies it has
17 committed acts of infringement. To the extent Paragraph 19 of the Counterclaims
18 contains conclusions of law, no response is necessary.

19 20. Sonos denies the allegations and characterizations contained in
20 Paragraph 20 of the Counterclaims and specifically denies it has committed acts of
21 infringement. To the extent Paragraph 20 of the Counterclaims contains
22 conclusions of law, no response is necessary.

23 21. Sonos admits that Exhibits 3 and 4 purport to be printed copies of
24 Sonos webpages. Sonos denies the remaining allegations and characterizations
25 contained in Paragraph 21 of the Counterclaims and Exhibit 2 and specifically
26 denies it has committed acts of infringement. To the extent Paragraph 21 of the
27 Counterclaims contains conclusions of law, no response is necessary.
28

22. Sonos denies the allegations and characterizations contained in Paragraph 22 of the Counterclaims and specifically denies it has committed acts of infringement. To the extent Paragraph 22 of the Counterclaims contains conclusions of law, no response is necessary.

23. Sonos denies the allegations and characterizations contained in Paragraph 23 of the Counterclaims and specifically denies it has committed acts of infringement. To the extent Paragraph 23 of the Counterclaims contains conclusions of law, no response is necessary.

24. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the allegations and characterizations concerning the alleged harm Google purports to have suffered contained in Paragraph 24 of the Counterclaims and, on that basis, denies them. Sonos denies the remaining allegations contained in paragraph 24 of the Counterclaims. To the extent Paragraph 24 of the Counterclaims contains conclusions of law, no response is necessary.

SECOND CAUSE OF ACTION

25. Sonos incorporates by reference each of its responses to paragraphs 1-24 of the Counterclaims set forth above as if fully set forth herein.

26. Sonos denies the allegations in Paragraph 26 of the Counterclaims insofar as they purport to attribute to the '790 Patent anything that is not stated therein. Sonos admits that Exhibit 5 of the Counterclaims purports to be a copy of the '790 Patent. Sonos admits that the '790 Patent is entitled "Apparatus and Method for Seamless Commissioning of Wireless Devices" and that it bears an issuance date of November 1, 2016. Sonos is currently without knowledge or information sufficient to form a belief as to the truth or falsity of the remaining allegations and characterizations contained in Paragraph 26 of the Counterclaims and, on that basis, denies them.

1 27. Sonos is currently without knowledge or information sufficient to
2 form a belief as to the truth or falsity of the allegations and characterizations
3 contained in Paragraph 27 of the Counterclaims and, on that basis, denies them.

4 28. Sonos denies the allegations and characterizations contained in
5 Paragraph 28 of the Counterclaims.

6 29. Sonos denies the allegations and characterizations contained in
7 Paragraph 29 of the Counterclaims and specifically denies it has committed acts of
8 infringement. To the extent Paragraph 29 of the Counterclaims contains
9 conclusions of law, no response is necessary.

10 30. Sonos denies the allegations and characterizations contained in
11 Paragraph 30 of the Counterclaims.

12 31. Sonos denies the allegations and characterizations contained in
13 Paragraph 31 of the Counterclaims and Exhibit 6 and specifically denies it has
14 committed acts of infringement. To the extent Paragraph 31 of the Counterclaims
15 contains conclusions of law, no response is necessary.

16 32. Sonos denies the allegations and characterizations contained in
17 Paragraph 32 of the Counterclaims and specifically denies it has committed acts of
18 infringement. To the extent Paragraph 32 of the Counterclaims contains
19 conclusions of law, no response is necessary.

20 33. Sonos admits that Exhibits 3 and 4 purport to be printed copies of
21 Sonos webpages. Sonos denies the remaining allegations and characterizations
22 contained in Paragraph 33 of the Counterclaims and Exhibit 6 and specifically
23 denies it has committed acts of infringement. To the extent Paragraph 33 of the
24 Counterclaims contains conclusions of law, no response is necessary.

25 34. Sonos denies the allegations and characterizations contained in
26 Paragraph 34 of the Counterclaims and specifically denies it has committed acts of
27 infringement. To the extent Paragraph 34 of the Counterclaims contains
28 conclusions of law, no response is necessary.

1 35. Sonos denies the allegations and characterizations contained in
2 Paragraph 35 of the Counterclaims and specifically denies it has committed acts of
3 infringement. To the extent Paragraph 35 of the Counterclaims contains
4 conclusions of law, no response is necessary.

5 36. Sonos is currently without knowledge or information sufficient to
6 form a belief as to the truth or falsity of the allegations and characterizations
7 concerning the alleged harm Google purports to have suffered contained in
8 Paragraph 36 of the Counterclaims and, on that basis, denies them. Sonos denies
9 the remaining allegations contained in paragraph 36 of the Counterclaims. To the
10 extent Paragraph 36 of the Counterclaims contains conclusions of law, no response
11 is necessary.

12 **RESPONSE TO PRAYER FOR RELIEF**

13 Sonos denies that Google is entitled to any of the relief requested in
14 paragraphs A-M of the Counterclaims or any other relief.

15 **DEFENSES TO COUNTERCLAIMS**

16 Subject to the responses above, Sonos alleges and asserts the following
17 defenses in response to the allegations, undertaking the burden of proof only as to
18 those defenses deemed affirmative defenses by law, regardless of how such
19 defenses are denominated herein. In addition to the affirmative defenses described
20 defenses are denominated herein. In addition to the affirmative defenses described
21 below, subject to its responses above, Sonos specifically reserves all rights to allege
22 additional affirmative defenses that become known through the course of discovery:

23 **FIRST DEFENSE – NON-INFRINGEMENT**

24 Sonos does not infringe and has not infringed (either directly, contributorily,
25 or by inducement), either literally or under the doctrine of equivalents, and is not
26 liable for infringement of any valid and enforceable claim of the '790 or '608
27 Patents ("Counterclaim Patents").
28

SECOND DEFENSE – INVALIDITY

Each asserted claim of the Counterclaim Patents is invalid for failure to comply with one or more of the requirements of United States Code, Title 35, including without limitation, 35 U.S.C. §§ 101, 102, 103, and/or 112, the non-statutory doctrine of double patenting, improper inventorship, and the rules, regulations, and laws pertaining thereto.

For example, each asserted claim of the Counterclaim Patents recites either “[receiving / receive] from a wireless device in proximity to the target device a request to initiate a commissioning process with the target device” or “receiving a message to initiate a commissioning process with the target streaming media device.” Neither of these limitations finds written description support in compliance with 35 U.S.C. § 112.

As another example, each asserted claim of the Counterclaim Patents is anticipated and/or rendered obvious under 35 U.S.C. §§ 102 and/or 103 by each of (a) Sonos’s U.S. Patent 8,326,951, (b) various versions of Sonos’s commercial products that have been publicly available before April 11, 2012 and March 15, 2013, including Sonos’s original commercial products released in January 2005, and (c) U.S. Patent 8,798,671.

THIRD DEFENSE – UNENFORCEABILITY

Google is not entitled to any relief against Sonos in this action because the Counterclaim Patents are unenforceable due at least to the inequitable conduct committed during prosecution of the ’790 and ’608 Patents. Sonos incorporates by reference paragraphs ___ of its Counterclaims as if set forth herein in their entirety.

SEVENTH DEFENSE – EQUITABLE ESTOPPEL

On information and belief, Google’s claims against Sonos are barred by the doctrine of equitable estoppel.

EIGHT DEFENSE – WAIVER

On information and belief, Google’s claims against Sonos are barred by the doctrine of waiver.

NINTH DEFENSE – PROSECUTION HISTORY ESTOPPEL

On information and belief, due to admissions and statements made to the United States Patent and Trademark Office during the prosecution of the applications that resulted in the Counterclaim Patents or related patent applications, Google is estopped from construing a valid and enforceable claim, if any, of the Counterclaim Patents as infringed literally or under the doctrine of equivalents by the accused products.

TENTH DEFENSE – UNCLEAN HANDS

On information and belief, Google’s claims against Sonos are barred by the doctrine of unclean hands.

ELEVENTH DEFENSE – LIMITATION ON PATENT DAMAGES

On information and belief, Google’s claims for damages, if any, against Sonos for alleged infringement of the Counterclaim Patents are limited by 35 U.S.C. §§ 286, 287, and/or 288.

TWELFTH DEFENSE – ENSNAREMENT

On information and belief, Google’s claims for infringement against Sonos are barred by the doctrine of ensnarement.

THIRTEENTH DEFENSE – SUBSTANTIAL NON-INFRINGEMENT USE

Any and all accused instrumentalities have substantial uses that do not infringe and do not induce or contribute to the alleged infringement of the claims of the Counterclaim Patents.

FOURTEENTH DEFENSE – OTHER DEFENSES

Sonos reserves the right to amend its Answer to include other additional defenses that Sonos may learn of during the course of this litigation.

RESERVATION OF RIGHTS

Sonos hereby reserves the right to amend its Answer and reserves any and all additional defenses available to it under Title 35, U.S.C., or the rules, regulations, and laws related thereto, the Federal Rules of Civil Procedure including any defenses set out in Rule 8(c), the Rules of this Court, or otherwise in law or equity, now existing or later arising, as may be discovered or become applicable throughout discovery or otherwise in the course of litigation.

COUNTERCLAIMS

In accordance with Rule 13 of the Federal Rules of Civil Procedure, Sonos hereby alleges and asserts the following counterclaims against Google:

INTRODUCTION

1. Over its 10+ year history of negotiating with Sonos, Google has refused to compete fairly, respect intellectual property, or obey relevant ethical rules of conduct. As detailed in Sonos's operative Complaint in this action, Sonos attempted to negotiate in good faith with Google on licensing Sonos's patent portfolio while Google aggressively and willfully infringed Sonos's patents. When Google stopped responding, Sonos had no choice but to turn to the courts. Rather than defend itself on the merits, Google used its vast wealth and power to file a multitude of baseless, retaliatory countersuits against Sonos around the country and abroad. Google filed failed suits against Sonos in California, at the International Trade Commission, in Germany, in the Netherlands, and in Canada. This countersuit is the latest embodiment of Google's abuse of process, designed to merely frustrate the proceedings and drain Sonos's resources in an effort to force Sonos to give up its infringement claims against Google.

2. Here, Google has asserted two patents against Sonos stemming from a patent family that Google purchased from Revolv in 2014. Once Google got involved in their prosecution, Google proceeded to twist this patent family's disclosure with a series of continuations in a blatant attempt to obtain claims on something it didn't invent and which cover technology Sonos disclosed nearly a decade earlier in its patent family – all while negotiating with Sonos.

3. Google faced an uphill battle. To weaponize this patent family against Sonos, Google had to somehow obtain claim coverage for a setup process that was already in the public domain. This impossible task led to Google's in-house counsel orchestrating a decade-long scheme to repeatedly and deliberately

1 withhold invalidating art and other materially relevant information from the
2 USPTO to ensure the USPTO would grant the patents that Google needed.

3 4. Inequitable conduct occurs when an individual who owes a duty to
4 disclose material information to the USPTO, knows information, knows that the
5 information is materially relevant to patentability, and fails to disclose the
6 information to the USPTO with an intent to deceive the USPTO.

7 5. The duty to disclose material information to the USPTO stems from
8 the Duty of Candor and Good Faith, which is set forth in 37 C.F.R. § 1.56, stating
9 in part:

10 A patent by its very nature is affected with a public interest. The
11 public interest is best served, and the most effective patent
12 examination occurs when, at the time an application is being
13 examined, the Office is aware of and evaluates the teachings of all
14 information material to patentability. Each individual associated
15 with the filing and prosecution of a patent application has a duty
16 of candor and good faith in dealing with the Office, which includes
17 a duty to disclose to the Office all information known to that
18 individual to be material to patentability as defined in this section.

19 37 C.F.R. § 1.56.

20 6. MPEP 2001.06(c) also states, in part:

21 Where the subject matter for which a patent is being sought is or
22 has been involved in litigation and/or a trial proceeding, or the
23 litigation and/or trial proceeding yields information material to
24 currently pending applications, the existence of such litigation and
25 any other material information arising therefrom must be brought
26 to the attention of the examiner or other appropriate official at the
27 U.S. Patent and Trademark Office. In particular, material
28 information that is raised in trial proceedings that is relevant to
related applications undergoing examination should be submitted
on an Information Disclosure Statement for the examiner's
consideration. Examples of such material information include . . .
prior art, allegations of "fraud," "inequitable conduct," and
"violation of duty of disclosure..." Such information might arise
during litigation and/or trial proceeding in, for example, pleadings,
admissions, discovery including interrogatories, depositions, and
other documents and testimony.

1 MPEP 2001.06(c).

2 7. Over the course of Sonos's discussion with Google about Sonos's
3 patents, Google's in-house counsel substantively involved in prosecution of the
4 Google Asserted Patents repeatedly and knowingly violated this Duty of Candor
5 and Good Faith and thus committed inequitable conduct when they learned of
6 information material to patentability of the Google Asserted Patents and
7 knowingly failed to disclose this information to the USPTO. As the facts
8 demonstrate, such failure was done with the intent to deceive the USPTO into
9 issuing otherwise invalid patents.

10 8. One Google in-house counsel – who was substantively involved in
11 prosecution of the Google Asserted Patents at the same as he was involved in
12 substantive patent negotiations with Sonos on behalf of Google – (i) discovered a
13 Motorola patent that Google recently acquired that disclosed nearly identical
14 subject matter to the Google Asserted Patents, (ii) specifically brought it to
15 Sonos's attention in negotiations with Sonos, and then (iii) deliberately failed to
16 cite it during prosecution of the Google Asserted Patents.

17 9. Another Google in-house counsel – who was substantively involved
18 in prosecution of the Google Asserted Patents and related family members at the
19 same time as he was involved in substantive patent negotiations with Sonos on
20 behalf of Google – was on the receiving end of Sonos's draft complaint in this
21 case alleging infringement of a Sonos patent that – 8 years earlier than Google's
22 Asserted Patents – disclosed nearly identical subject matter to the Google
23 Asserted Patents. This individual also deliberately failed to cite this Sonos patent
24 during prosecution.

25 10. And during the course of Sonos defending itself against one of
26 Google's failed suits alleging infringement of the direct parent to the '608 Patent,
27 Google's in-house counsel substantively involved in prosecution of the Google
28 Asserted Patents and related family members became aware of Sonos's invalidity

1 contentions, inequitable conduct allegations, and *Inter Partes* Review Petition
2 detailing the relevance of certain prior art asserted against this direct parent.
3 Again, this counsel, in a brazen disregard for the rules, deliberately failed to cite
4 these contentions, allegations, and this *Inter Partes* Review Petition during
5 prosecution of one of the Google Asserted Patents.

6 11. This misconduct was not a one-time oversight, but rather a sustained
7 multi-year, deliberate scheme, perpetrated by multiple Google in-house counsel to
8 conceal materially relevant information and multiple invalidating prior art
9 references from the USPTO with full knowledge that the Google Asserted Patents
10 would not have issued but for Google's knowing silence. This was inequitable
11 conduct in its purest form, multiple times over – a deliberate, coordinated effort to
12 mislead the USPTO, secure invalid patents, and then wield them in bad faith
13 against the very company whose prior art Google concealed.

14 15 **TIMELINE OF RELEVANT DISCLOSURES**

16 **A. Sonos's Invention**

17 12. In 2004, Sonos filed a provisional patent application¹ relating to
18 setup technology, thereby establishing Sonos's Setup Patent Family, and in 2005
19 filed a non-provisional patent application², claiming priority to this provisional
20 patent application. The technology disclosed in Sonos's Setup Patent Family was
21 invented by Sonos engineers Nick Millington and Paul Hainsworth and related to
22 devices, methods, and computer-readable media for connecting a "playback
23 device" to a secure wireless local area network (WLAN), thereby setting up the
24 "playback device" for use in a networked audio system.

25
26 ¹ U.S. Provisional Patent Application No. 60/577,284.

27 ² U.S. Patent Application No. 11/147,116 matured into U.S. Patent No. 8,326,951 ("Millington
28 '951"). The patents and applications in this Sonos patent family, which claim priority to
Millington '951 and the Provisional application referred to above are collectively referred to
herein as "Sonos's Setup Patent Family").

1 13. In particular, the Sonos inventors recognized problems with
2 conventional device-setup technology for connecting “consumer electronic
3 devices” (e.g., “home entertainment products”) to a network. *See, e.g.*, U.S. Pat.
4 No. 10,439,896 (“Millington ’896”)³ at 1:37-67. For instance, the inventors
5 recognized that “[c]onsumer electronic devices that operate using wireless or
6 wired Ethernet standards are often subject to the same complicated set-up process
7 as a wireless computer network.” *Id.* at 1:37-39.

8 14. In this respect, a conventional setup process typically required “the
9 person who sets up the wireless network [to] have at least some knowledge about
10 IP (Internet Protocol) networking and Ethernet (e.g., 802.3, 802.11), such as
11 addressing, security, broadcast, unicast, etc.” *Id.* at 1:40-43. At the time of the
12 inventions, typically only “IT professionals” possessed such knowledge. *Id.* at
13 1:43-46. Therefore, to connect a computer to a wireless network, “the user [had]
14 to know what type of network the computer [was] going to be connected to,”
15 which was a “difficult question [for] the average consumers” to answer. *Id.* at
16 1:57-63. Moreover, there were additional “questions or options related to []
17 security settings [] which evidently require[d] some good understanding about the
18 network security over the wireless network.” *Id.* at 1:63-67. Thus, the inventors
19 recognized that it was “impractical to require average consumers to have such
20 knowledge to hook up consumer electronic devices, such as home entertainment
21 products that use wireless/wired Ethernet connectivity.” *Id.* at 1:46-49.

22 15. The inventors also recognized that a device that has yet to be setup
23 on a network has “limited networking capability” and is not addressable by other
24

25 ³ Because Millington ’951, Millington ’896, and the other patents in Sonos’s Setup Patent Family
26 all claim a common priority and share a common specification, Sonos cites to Millington ’896
27 for ease of reference in connection with the disclosures found in this common
28 specification. Sonos expressly reserves the right to rely on the same disclosure found in the
specific specification of the Millington ’951 and/or the other patents in Sonos’s Setup Patent
Family.

1 devices, which presents technical challenges as to how that device can receive
2 information that facilitates the device's setup to operate on the network. *See*,
3 *e.g.*, '896 Patent at 11:4-14.

4 16. Consequently, the inventors recognized that there was "a clear need
5 to create simple methods of setting up and maintaining a secure wireless/wired in-
6 home network with minimum human interventions." *Id.* at 2:1-4.

7 17. The claimed inventions of the patents in Sonos's Setup Patent Family
8 are directed to technology that provides a solution to such needs. In particular, as
9 disclosed in the patents in Sonos's Setup Patent Family, the technology involved a
10 computing device (such as an external handheld controller or computer)
11 establishing an initial communication path with the playback device that does not
12 traverse the wireless network. Via this initial communication path, the computing
13 device would send certain network parameters to the playback device that the
14 playback device could subsequently use to access the secure wireless network.
15 After receiving the network parameters, the playback device would use the
16 network parameters to access the secure wireless network and then switch over to
17 operate on the secure wireless network and subsequently communicate with the
18 computing device via the secure wireless network. Once this process was
19 complete, a visual indication representing the completion was displayed on the
20 computing device and/or the playback device.

21 18. The setup technology disclosed in Sonos's Setup Patent Family
22 provides significant advantages that are important to wireless audio systems. The
23 advantages of Sonos's patented playback-device-setup technology are reflected in
24 the recognition and praise it has received from the press. For example, in 2015,
25 *Ars Technica* explained:

26 There was no convoluted wireless setup, syncing issues, or
27 complex software to decipher: I simply downloaded the Sonos app
28 on the Google Play Store, pushed the sync button on the back of

1 the speaker, and it did the rest. When you can describe the entire
2 setup procedure in a single sentence, that's special.

3 Dkt. 68-8 at Ex. 76.

4 19. Likewise, *Gizmodo* touted Sonos's patented playback-device-setup
5 technology as "so easy that anybody can do it." Dkt. 68-8 at Ex. 77. And
6 *Consumer Reports* explained that Sonos's playback-device-setup technology is
7 "pretty simple." Dkt. 68-8 at Ex. 78.

8 20. Recognizing the advantages of Sonos's patented playback-device-
9 setup technology, competitors in the industry, including Google, have
10 incorporated Sonos's patented technology into their products and marketed the
11 features that the technology enables to their customers. For example, to market its
12 Google Audio Players on its website, Google includes a dedicated "Setup" tab
13 that touts how "[g]etting set up is simple." *See, e.g.*, Dkt. 68-8 at Ex. 79. As
14 another example, Google's website includes a webpage entitled "Set up your
15 Google Nest or Google Home speaker or display," which explains that "[t]he
16 Google Home app will walk you through the steps to set up your Google Nest or
17 Google Home speaker or display." Dkt. 68-8 at Ex. 80.

18 21. The media has also recognized the importance of Sonos's patented
19 playback-device-setup technology to Google and its customers. For instance,
20 *Android Central* published an article entitled "How to set up Google Home and
21 other Google Assistant speakers," which touted Google's setup as a "simple
22 process." Dkt. 68-9 at Ex. 81. Similarly, *Tom's Guide* exclaimed that the Google
23 Home Mini is a "cinch to set up" and further described the setup procedure as
24 "pretty straightforward." Dkt. 68-9 at Ex. 82; *see also, e.g.*, Dkt. 68-9 at Ex. 83
25 (2019 CNET article explaining that "[i]t's easy to set up your Google Home . . .
26 speaker for the first time").
27
28

B. Motorola's Patent Application

22. In 2006 (a year after the initial applications were filed in Sonos's Setup Patent Family), Motorola Inc. filed a patent application⁴ directed to technology purportedly invented by David Grubb involving configuring a device for operation on a wireless network. In particular, the application disclosed technology for using an RF radio of a first device to establish a first wireless connection to an RF radio of a second device. Via this first wireless connection, the first device would transmit network configuration parameters to the second device. The second device would subsequently use these network configuration parameters to access and operate on a separate wireless network. Once the second device was operating on the separate wireless network, the first device and the second device could stop using their respective RF radios and begin communicating over the separate wireless network using respective wireless network transceivers. Once this process was complete, a visual indication representing the completion was displayed on the first device and/or the second device.

C. Mobiplug's (then Revolv's and then Nest's) Patent Application

23. Over a half decade later, in 2012, a Colorado-based company called Mobiplug Networks filed a provisional patent application⁵ and in 2013 filed a non-provisional patent application⁶ directed to technology purportedly invented by Jeff Mathews and Lee Taylor for commissioning a wireless device to operate on a secure wireless network.

⁴ U.S. Patent Application No. 11/460,121 ("Motorola '121 Application") matured into U.S. Patent No. 8,798,671 ("Motorola '671").

⁵ U.S. Provisional Patent Application No. 61/622,620 ("Mathews Provisional").

⁶ U.S. Patent Application No. 13/839,828 ("Mathews '828 App.") matured into U.S. Patent No. 9,198,204 ("Mathews '204"). The patents and applications in this Mathews patent family, which claim priority to the Mathews Provisional and Mathews '204 are collectively referred to herein as either "Google's Setup Patent Family" or "Mathews Patent Family").

1 24. As the Mathews Provisional admits, by 2012, consumer products like
2 streaming media devices (e.g., Apple TV) existed that required configuration prior
3 to operation and more specifically, required to be first commissioned onto a
4 wireless local area network (WLAN) in order to complete their configuration. *See*
5 Mathews Provisional, pp. 1-3; *see also, e.g.*, Mathews '790, 1:28-40, 1:46-53.

6 25. As the Mathews Provisional also admits, by 2012, to commission
7 such a consumer product, WLAN configuration data had to be provided by a
8 commissioning device or equipment (e.g., a computer, smartphone, etc.) to the
9 consumer product. *See* Mathews Provisional, pp. 1-3; *see also, e.g.*,
10 Mathews '790, 1:46-67, 4:17-6:48.

11 26. As the Mathews Provisional further admits, by 2012, there were
12 several prior art techniques for commissioning a consumer product onto a WLAN,
13 including some that involved utilizing a short-range signal transmission path (e.g.,
14 a short-range radio frequency (RF) path) between the commissioning device and
15 consumer product to exchange WLAN configuration data. *See* Mathews
16 Provisional, pp. 1-3; *see also, e.g.*, Mathews '790, 4:17-6:48.

17 27. According to the Mathews Provisional, a disadvantage of prior art
18 commissioning techniques was that certain techniques, such as RF-based
19 techniques, required “additional expensive hardware” which “increas[ed] overall
20 system cost.” *See* Mathews Provisional, pp. 2-3; *see also id.*, p. 8; *see also, e.g.*,
21 Mathews '790, 6:29-31.

22 28. In turn, according to the Mathews Provisional, an advantage of the
23 purported invention was utilizing “existing built-in components” of the
24 commissioning device to transmit WLAN configuration data to the consumer
25 product being commissioned. *See* Mathews Provisional, pp. 3, 8; *see also, e.g.*,
26 Mathews '790, Abstract, 7:32-52.

27 29. More specifically, the Mathews Provisional touts the advantage of
28 using commissioning devices’ existing “display screens, backlights, speakers,

1 microphones, and the like” for “visual communication of commissioning
2 messages.” *See* Mathews Provisional, p. 8; *see also, e.g.*, Mathews ’790,
3 Abstract, 7:32-52.

4 30. The Mathews Provisional elaborates on the cost savings of the
5 “present invention” as compared to existing RF techniques as follows:

6 It is noted that RF near field communication techniques for
7 commissioning require additional hardware in both commissioning
8 devices and product devices. Advantageously, according to the present
9 invention, optical and/or audio transmission/reception elements
10 already exist on most commercially available devices for use as a
11 commissioning device, such as a smartphone. In addition, required
12 optical hardware sensors that must be integrated into a product device
13 are also very inexpensive when compared to RF NFC receivers.

14 *See* Mathews Provisional, p. 8.

15 31. The Mathews Provisional illustrates and describes an embodiment of
16 its “visual communication” of WLAN configuration data in which “a built-in
17 camera flash” of a smartphone or “a backlight function of the display” serves to
18 “optically transmit[]” the WLAN configuration data.
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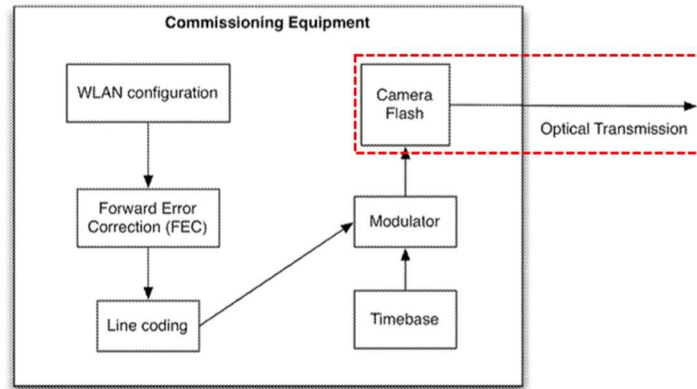


Figure 6.

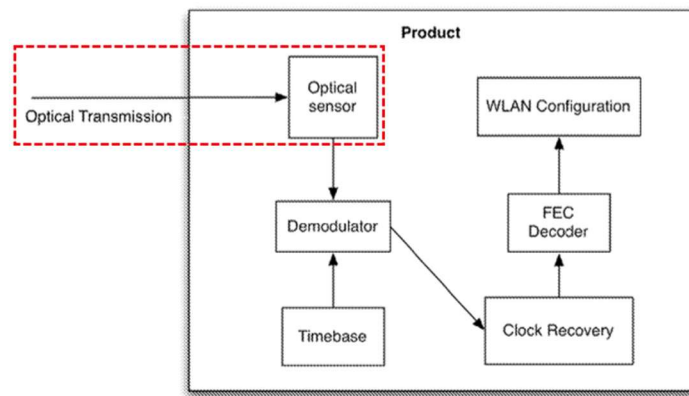


Figure 7.

See Mathews Provisional, pp. 4-5.

32. This purported innovation is reflected in the claims of Mathews '204. See, e.g., Mathews '204, cl. 1 (reciting a “smart wireless device” and “target device” exchanging “WLAN configuration packets” via a “transducer”), cl. 5 (reciting exchanging “WLAN configuration packets” via “camera flash”), cl. 6 (reciting exchanging “WLAN configuration packets” via “modulat[ing]” “a backlit display”).

33. Mobiplug changed its name to Revolv Inc. in 2013.

D. Google Acquires the Motorola and Revolv Patent Applications and Begins to Morph the Mathews Patent Family

34. In 2012, Google acquired the Motorola '121 Application. The patent stemming from this application – Motorola '671 – was assigned to Google Technology Holdings LLC, in October 2014.

1 35. Google acquired Nest Labs in January 2014. Then, in October 2014,
2 Nest Labs acquired Revolv Inc. and thus acquired the Mathews Provisional and
3 the Mathews '828 App. The Mathews Provisional App. And Mathews '828 App.
4 were assigned to Google Inc. on November 20, 2014.

5 36. Therefore, by no later than November 2014, Google owned (1)
6 Motorola '671, (2) the Mathews Provisional, and (3) the Mathews '828 App.

7 37. It was at this point that Google began morphing the purported
8 Mathews invention into a shell of its former self as a litigation weapon to use
9 against Sonos. In this regard, after the allowance of Mathews '204, Google began
10 manufacturing patent grants —starting with Mathews '790 in 2016 and more
11 recently Mathews '608 in 2024— with claims whose subject matter has little to no
12 resemblance to the purported innovation that Mr. Mathews contributed to.

13 38. Indeed, in many instances —including in Mathews '790 and
14 Mathews '608— Google finagled patents whose claims read on various
15 techniques the Mathews Provisional admits were well known as of 2012. Worse,
16 many of the patents Google has extracted from the USPTO were intentionally
17 prosecuted to cover subject matter that Sonos's own June 2004 Setup Patent filing
18 disclosed almost a decade before the Mathews Patent Family, yet the Google
19 attorneys involved with such prosecution intentionally failed to disclose the
20 patents in Sonos's Setup Patent Family and Motorola '671 to the USPTO.

21 **GOOGLE PROSECUTES THE MATHEWS PATENT FAMILY**

22 39. As noted, once Google acquired the Mathews Provisional and the
23 Mathews '828 App. in 2014, Google's in-house prosecution attorneys in
24 conjunction with Google's outside prosecution attorneys took over responsibility
25 for prosecuting the Mathews '828 App. One of the Google in-house attorneys
26 substantively involved with prosecution of the Mathews '828 App. was Louis
27 Sorell. According to Mr. Sorell's LinkedIn page, he was hired by Google in 2011
28

for the role of “Patent Counsel,” and in 2018 was promoted to “Senior Patent Counsel.” Further according to Mr. Sorell’s LinkedIn page, he states:

I have extensive experience in patent litigation as well as the preparation and prosecution of patent applications and patent opinions, in a wide range of technologies.

Ex. 137.

40. Further evidencing that Mr. Sorell was substantively involved in prosecution of the Mathews ’828 App. is that Mr. Sorell appears as one of the registered patent attorneys associated with the customer number designated as Prosecuting Counsel by the power of attorney filed in the Mathews ’828 App. In particular, in or around February 2015, Doug Crisman at Morgan, Lewis, & Bockius LLP filed a power of attorney executed by Google Deputy General

PTO/AIA/82A(07-12)
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U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in the attached transmittal letter.

☒ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent): 82750

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A or equivalent):

Name	Registration Number	Name	Registration Number

Please recognize or change the correspondence address for the application identified in the attached transmittal letter to:

☒ The address associated with the above-mentioned Customer Number.

OR

☐ The address associated with Customer Number:

OR

☐ Firm or Individual Name

Address

City State Zip

Country

Telephone Email

I am the Applicant:

☐ Inventor or Joint Inventor

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document)

SIGNATURE of Applicant for Patent

Signature Date June 4, 2013

Name Telephone 650-253-0000

Title and Company Deputy General Counsel & Assistant Secretary, Google Inc.

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms for more than one signature, see below.

☐ *Total of forms are submitted.

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 38 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 22315-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22315-1450.

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

Counsel Allen Lo “[a]ppointing Practitioner(s) associated with” Customer Number “82750” as Google’s “attorney(s) or “agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the” Mathews ’828 App. Customer Number “82750” lists Mr. Sorell as one of the designated Prosecution Counsel.

Correspondence address		Maintenance fee address	
82750 - Morgan, Lewis & Bockius LLP (PA) (Google) 1400 Page Mill Road Palo Alto, CA 94304-1124 UNITED STATES		82750 - Morgan, Lewis & Bockius LLP (PA) (Google) 1400 Page Mill Road Palo Alto, CA 94304-1124 UNITED STATES	
WILLIAMS, GARY (650) 843-7501	31066	WILLIAMS, GARY (650) 843-7501	31066
SORELL, LOUIS (646) 831-5672	32439	SORELL, LOUIS (646) 831-5672	32439
SMALL, JONATHAN (650) 253-0262	32631	SMALL, JONATHAN (650) 253-0262	32631
BUTTER, GARY (212) 565-1225	33841	BUTTER, GARY (212) 565-1225	33841
VAAS, RANDALL (616) 446-4103	34479	VAAS, RANDALL (616) 446-4103	34479
LYONS, MICHAEL	37386	LYONS, MICHAEL	37386

41. The Mathews ’828 App. issued as U.S. Patent No. 9,198,204 on November 24, 2015. However, prior to this issuance, Google filed a continuation application, which was assigned application no. 14/927,406 (“Mathews ’406 App.”). The Mathews ’406 App. would eventually issue as the ’790 Patent, which is asserted against Sonos in Google’s Counterclaims and referred to herein as “Mathews ’790”.

42. Mr. Sorell was substantively involved in the decision to file the Mathews ’406 App.

43. Mr. Sorell was substantively involved in the prosecution of the Mathews ’406 App.

1 44. In fact, on the same day the Mathews '406 App. was filed, October
2 29, 2015, Mr. Crisman at Morgan, Lewis, & Bockius filed the same Power of
3 Attorney appointing Mr. Sorell and other practitioners associated with Customer
4 Number "82750" as Google's "attorney(s) or "agent(s)" designed to conduct all
5 business in connection with the Mathews '406 Application.

6 **TIMELINE OF SONOS-GOOGLE NEGOTIATIONS AND**
7 **LITIGATION AMIDST GOOGLE'S PROSECUTION OF THE**
8 **MATHEWS PATENT FAMILY**

9 **A. 2016 Discussions**

10 45. As noted above, the Mathews '406 App. was filed October 29, 2015.
11 This application was filed amidst Sonos and Google's integration of Google Play
12 Music into the Sonos platform. As set out in Sonos's operative Complaint, this
13 integration gave Google a wide aperture through which to view Sonos's
14 proprietary technology. Though this integration, Google became familiar with
15 Sonos's system, including the setup process utilized by Sonos's products, and
16 thereby knew, at the time the Mathews '406 App. was filed, that this application
17 was attempting to claim subject matter that was prior art to the Mathews '406
18 App.

19 46. While the Mathews '406 App. was being prosecuted, Sonos and
20 Google began discussing Google's infringement of Sonos's patents and the need
21 for Google to obtain a license to Sonos's patents. As laid out in more detail in
22 Sonos's operative Complaint, Sonos notified Google on no fewer than 10 separate
23 occasions between September 2016 and December 2023 that Google was
24 infringing several Sonos patents, including patents directed to Sonos's setup
25 technology, disclosed and claimed in Sonos's Setup Patent Family, which
26 stemmed from Sonos's 2004 invention.

27 47. To start, on September 2, 2016, Sonos sent John LaBarre and Allen
28 Lo at Google a document identifying 24 issued Sonos patents and 4 allowed

Sonos patent applications, including Sonos's U.S. Patent No. 9,130,771 ("Millington '771"), which stemmed from and claimed priority to Sonos's 2004 setup invention. Dkt. 68-12 at Ex. 114 (annotated below). This was the same Mr. Lo that had just recently appointed Mr. Sorrell as Google's prosecuting attorney for the Mathews '828 App. via the February 2015 power of attorney.

Selected Additional Patent Disclosures of Interest to Google

	Pat. or App. No.	Title	Class/Subclass
1	9,202,509	Controlling and Grouping in a Multi-Zone Media System	Platform, Bonded Zone
2	9,219,959	Multi-Channel Pairing in a Media System	Platform, Bonded Zone
3	8,938,312	Smart Line-In Processing	Audio Content, Direct Connection to Household
4	9,130,771	Establishing A Secure Wireless Network with Minimum Human Intervention	Control, Setup
5	8,483,853	Controlling and Manipulating Groupings in a Multi-Zone Media System	Control, Grouping
6	9,363,255	Cloud Queue Playhead	Platform, Queue Management
7	14/041,989	Coordinator selection	Platform, Group Management
8	9,288,596	Coordinator Device for Paired or Consolidated Players	Platform, Bonded Zone

48. On October 13, 2016, Sonos sent John LaBarre, Allen Lo, and Mr. Sorell at Google a document identifying 22 issued Sonos patents and 6 allowed Sonos patent applications, including again Millington '771 and Sonos's U.S. Patent No. 8,326,951 ("Millington'951"), and identifying relevant Google products for each. Dkt. 68-12 at Ex. 115 (annotated below). Millington '951 was the first-filed non-provisional patent application in the Sonos Setup Patent Family, which issued in 2012.

To: John LaBarre[jlabarre@google.com]; Allen Lo[jalo@google.com]; Isorell[isorell@google.com]
Cc: Tom Cullen[Tom.Cullen@sonos.com]; Alaina Kwasizur[Alaina.Kwasizur@sonos.com]; Craig Shelburne[Craig.Shelburne@sonos.com]
From: Mark Triplett[O=EXCHANGELABS\OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)\CN=RECIPIENTS\CN=694E76097D884EE989D4D92F32BBE9B4-MARK TRIPLETT]
Sent: Thur 10/13/2016 2:39:48 PM Eastern Standard Time
Subject: RE: Sonos Meeting Follow Up
Attachment: Google Education Material 10_13_06.pdf

Hi John and Lou,

Attached is the other round of educational material that I mentioned in my email below. I apologize for not sending it last week. It should be helpful to better understand how certain Sonos patents relate to Google.

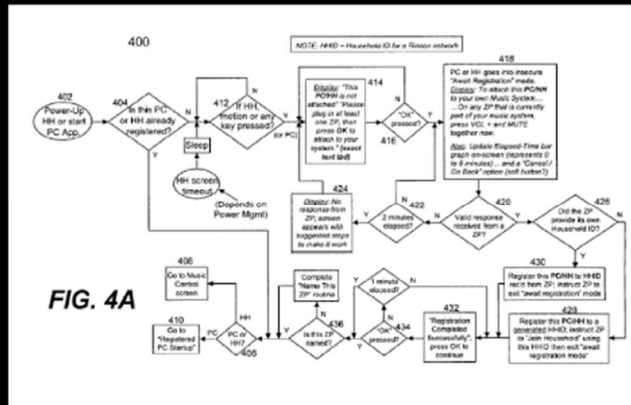
Also, please confirm our meeting on Tuesday, the 25th in sunny Santa Barbara and suggest a time that works best for you and Lou.

My Best,
Mark

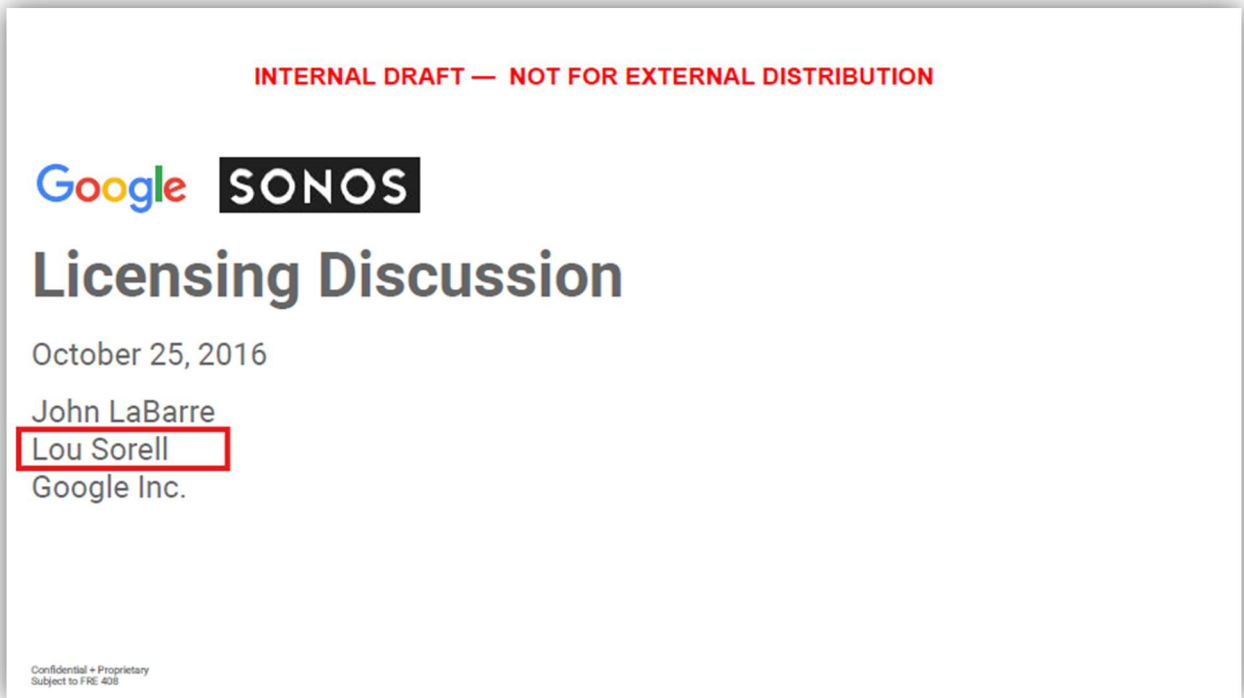
5. Setup Over WiFi		
1-2-3 Setup It takes just 3 steps to get your Sonos Digital Music System up and running: 1 Connect speakers to your ZonePlayer 2 Connect the first Sonos ZonePlayer (with Ethernet cable supplied) to your home network 3 Install the computer software (or use a Controller) to configure your music system Sonos User Guide, 2005	Easily cast music, without the hassle of pairing Tap the Cast button from your favorite music apps to start casting to your speakers. Adjust the volume or change the song, right from your phone. Unlike Bluetooth setup, Google Cast works over WiFi so you can connect more than one device to your speakers at a time and control what's playing from anywhere in the house. Google 2016	The following patent disclosure includes disclosure believed to be relevant to the setup of Chromecast Audio Dongle devices on a WiFi LAN now or in the future. • Pat. No. 8,326,951

49. And again, on or around October 26, 2016, Sonos sent John LaBarre at Google a PowerPoint presentation identifying 29 issued Sonos patents and 3 allowed Sonos patent applications, including again Millington '951, this time specifically highlighting that Millington '951 claimed priority to at least 2005, included 8 family members, and "disclosed subject matter [that] involves setup of multimedia players," specifically highlighting a key patent figure and disclosure from the Abstract. Dkt. 68-12 at Ex. 116 (annotated below). Sonos and Google conducted a multi-hour meeting to discuss this presentation and Sonos's patents. Mr. Sorell was present at this meeting.

Control – Controls a Sonos system

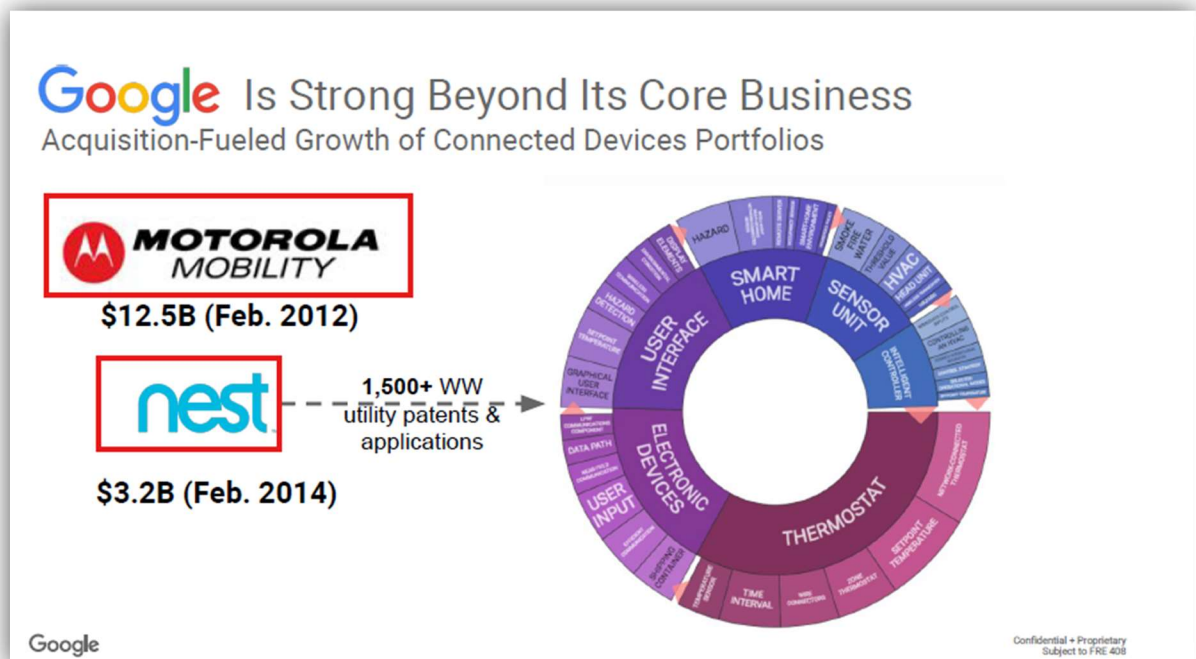


50. If Mr. Sorell wasn't aware of Sonos's Setup Patent Family before 2016, he certainly became aware of Sonos's Setup Patent Family and its relevance to Google's products by no later than October 2016.

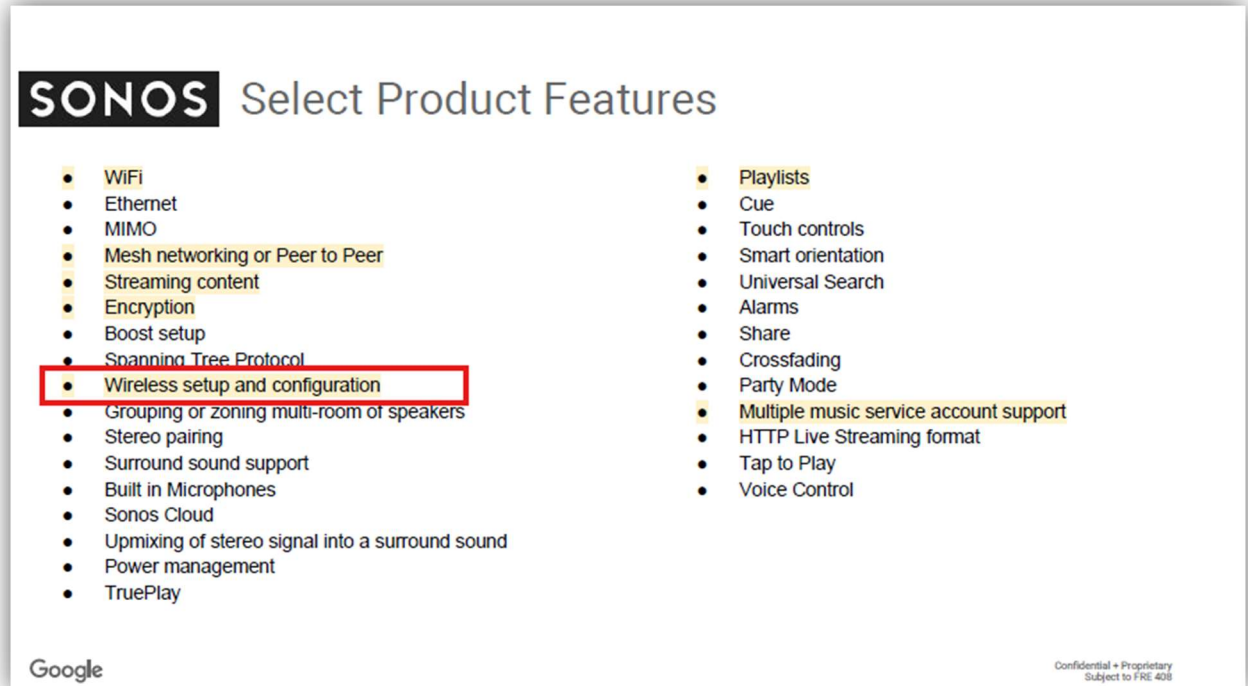


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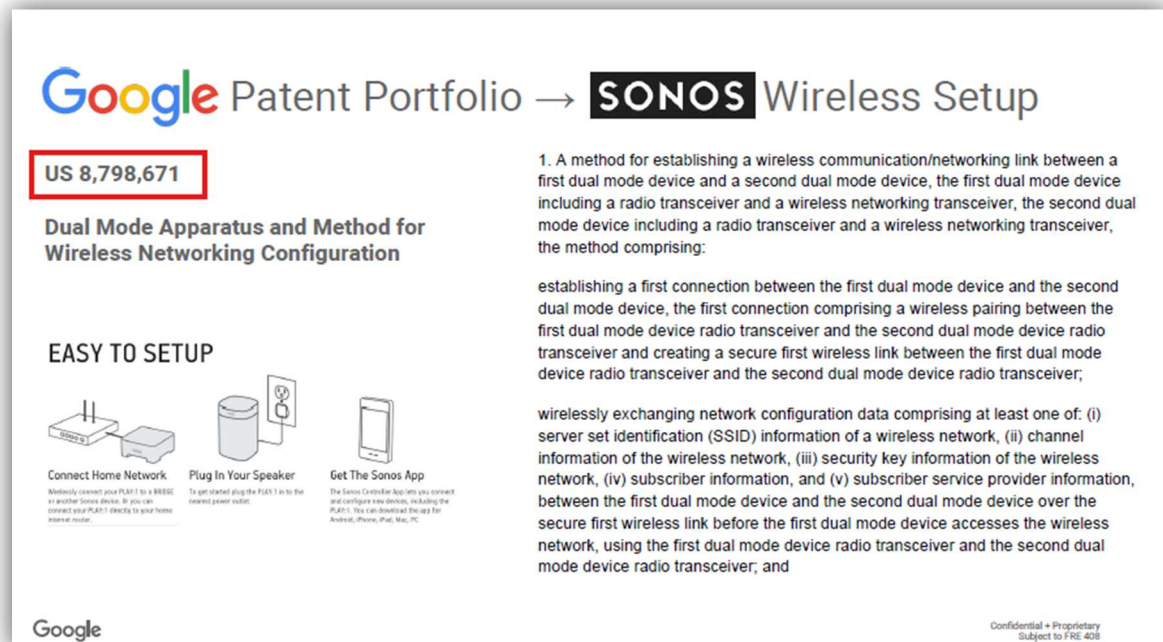
53. Among other things, this slide deck specifically acknowledged that Google had recently acquired Motorola Mobility and Nest Labs to supplement its patent portfolio.



54. Moreover, the slide deck admitted that Google knew Sonos had a “Wireless setup and configuration” feature.



55. The slide deck went on to specifically highlight Motorola '671, which Google had recently acquired from Motorola Mobility.



1 56. But despite being substantively involved in prosecution of the
2 Mathews '406 App., and despite that Sonos had just informed Mr. Sorell of
3 patents from Sonos's Setup Patent Family, Mr. Sorell made a deliberate decision
4 not to disclose any patents from Sonos's Setup Patent Family to the USPTO.

5 57. And despite being substantively involved in prosecution of the
6 Mathews '406 App., and despite that Mr. Sorell had just informed Sonos of
7 Motorola '671, Mr. Sorell made a deliberate decision not to disclose
8 Motorola '671 to the USPTO.

9 58. Mr. Sorell knew that the Sonos Setup Patent Family and
10 Motorola '671 had priority dates well before the priority date of the Mathews '406
11 App.

12 59. Mr. Sorell also knew that if he disclosed these references to the
13 USPTO, the USPTO would not have allowed the Mathews '406 App. to issue.

14 60. Mr. Sorrel's decision not to disclose any patents from Sonos's Setup
15 Patent Family or Motorola '671 to the USPTO violated his Duty of Candor and
16 Good Faith.

17 61. An examination of the file history of the Mathews '406 App. reveals
18 precisely why Mr. Sorell purposefully failed to disclose the Sonos Setup Patent
19 Family or Motorola '671 to the Examiner. The Examiner had just recently, on
20 July 5, 2016, issued a notice of allowance in the Mathews '406 App. Mr. Crisman
21 at Morgan, Lewis, & Bockius had also just transmitted the issue fee payment in
22

09/30/2016	IFEE	Issue Fee Payment (PTO-85B)
09/30/2016	WFEE	Fee Worksheet (SB06)
09/30/2016	N417	Electronic Filing System Acknowledgment Receipt
07/05/2016	NOA	Notice of Allowance and Fees Due (PTOL-85)

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27 the Mathews '406 App., which Mr. Sorell approved or instructed him to do.
28

1 62. Mr. Sorell knew that if he disclosed the Sonos Setup Patent Family
2 or Motorola '671 to the Examiner now – as he was obligated to do by the Duty of
3 Candor and Good Faith – the Examiner would not permit the Mathews '406 App.
4 to issue. And not having the Mathews '406 App. issue would have a negative
5 impact on Google's ability to negotiate with Sonos, as Google, and Mr. Sorell
6 specifically, were in the midst of attempting to secure patents that Google could
7 leverage in licensing discussions with Sonos. Without the Matthews '406 App.
8 proceeding to issuance, Mr. Sorell and Google would lose a weapon that Google
9 intended to use to stave off Sonos's increasing pressure.

10 63. So, in direct contravention of the Duty of Candor and Good Faith,
11 Mr. Sorell stayed silent, failed to disclose to the USPTO Millington '951,
12 Millington '771, or Motorola '671 – all of which were unquestionably prior art to
13 the Mathews '406 App., material to patentability (as set forth below), and would
14 have resulted in non-issuance of the Mathews '406 App. As a result of Mr.
15 Sorell's failure to abide by the Duty of Candor and Good Faith, the Mathews '406
16 App. issued as Mathews '790, which Google has now asserted against Sonos.

17 **B. 2018-2020 Discussions and Sonos's ITC Litigation**

18 64. Throughout 2018, 2019, and 2020, Sonos and Google continued
19 discussions, with Sonos providing even more notice of Sonos's patents and of
20 Google's infringement.

21 65. Relevant to this time period was another individual at Google –
22 Bradley Riel – who was substantively involved in prosecution of Google's
23 Mathews Patent Family while participating in discussions with Sonos concerning
24 Sonos's Setup Patent Family.

25 66. Mr. Riel had been patent counsel for Google since at least 2014 when
26 Google acquired Nest Labs. According to Mr. Riel's own LinkedIn profile, he
27 was "IP Counsel" for "Nest Labs (Subsidiary of Google)" from November 2013
28

1 to August 2018. Thereafter, he was “Patent Counsel” for Google from September
2 2018 to 2023.

3 67. Mr. Riel worked closely with Mr. Sorrell at Google.

4 68. At least during the period of September 2018 through early 2023,
5 Mr. Riel was substantively involved with the filing and prosecution of patent
6 applications for Google, including at least the filing and prosecution of patent
7 applications in Google’s Mathews Setup Patent family.

8 69. Mr. Riel worked closely with, and managed patent prosecution
9 activities carried out by, Google’s outside counsel, Mr. Crisman, at Morgan Lewis
10 & Bockius and then with counsel at Colby Nipper PLLC, such as Matthew
11 Johnson.

12 70. Mr. Riel held himself out as managing patent prosecution for Google.
13 For instance, in 2018 Mr. Riel participated in a panel discussion at a Licensing
14 Executives Society event. The program for such event describes Mr. Riel’s
15 practice:

16 Brad, as IP counsel, manages patent prosecution, licensing,
17 acquisition and other related activities for Google. He was patent
18 counsel previously at Nest Labs, a Google/Alphabet company
19 where he managed its patent prosecution, licensing ad [sic]
20 acquisition for Nest’s preeminent Internet-of-Things patent
21 portfolio, including integrating and coordinating the Nest IP
22 program with broader Google/Alphabet initiatives. He has held
23 law firm positions in the U.S., Japan and England, where he
24 performed IP prosecution and litigation support for a wide variety
25 of companies.

26 See <http://les-svc.org/event/23337/>. Mr. Riel participated in this panel with Mr.
27 Crisman, further evidencing that Mr. Riel and Mr. Crisman worked closely
28 together. *Id.*

29 71. As another example, Mr. Riel was substantively involved with the
30 filing and prosecution of Google’s U.S. Patent Application No. 15/960,337
31 (“Mathews ’337 App.”) (filed on April 23, 2018 and issued on December 10,

1 2019 as U.S. Pat. No. 10,505,797). The Mathews '337 App. was the eighth non-
2 provisional patent application filed in the ever-growing Mathews Patent Family.

3 72. During the filing and prosecution of the Mathews '337 App., Mr.
4 Riel was knowledgeable about the content of this application, contributed to the
5 decision to file this application, and contributed to claim drafting strategy for this
6 application. Mr. Riel was knowledgeable about the prosecution of the
7 Mathews '337 App., reviewed and approved draft submissions to the USPTO, and
8 reviewed and approved draft claim amendments submitted during prosecution of
9 the Mathews '337 App.

10 73. As another example, Mr. Riel was substantively involved with the
11 filing and prosecution of U.S. Patent Application No. 16/708,189 ("Mathews '189
12 App.") (filed on December 9, 2019 and issued on June 29, 2021 as U.S. Pat. No.
13 11,050,615 ("the '615 Patent")). The Mathews '189 App. is a continuation of the
14 Mathews '337 App. and the direct parent to the asserted Mathews '608 Patent.

15 74. During the filing and prosecution of the Mathews '189 App., Mr.
16 Riel was knowledgeable about the content of this application, contributed to the
17 decision to file this application, and contributed to claim drafting strategy for this
18 application. Mr. Riel was knowledgeable about the prosecution of the
19 Mathews '189 App., reviewed and approved draft submissions to the USPTO, and
20 reviewed and approved draft claim amendments submitted during prosecution of
21 the Mathews '189 App.

75. Further evidencing that Mr. Riel (as well as Mr. Sorell) was substantively involved in prosecution of the Mathews '189 App. is that Mr. Riel appeared as one of the registered patent attorneys associated with the customer number designated as Prosecuting Counsel by the power of attorney filed in the Mathews '189 App. In particular, on December 9, 2019, Doug Crisman at Morgan, Lewis, & Bockius LLP filed a power of attorney executed by Google

DocuSign Envelope ID: EB0CA7D0-9841-4862-9B7F-4BFB2EAA26C4

PTO/AIA/80 (07-17)
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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: **82750**

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 assignment 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: **82750**

OR

☐ Firm or individual name

Address

City State Zip

Country

Telephone Email

Assignee name and address: Google LLC
1600 Amphitheatre Parkway, Mountain View, CA 94043

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 Jeremiah Chan Date 10/19/2017

Name Jeremiah Chan Telephone

Title Assistant Secretary of Google LLC

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 1.11 and 1.14. This collection is estimated to take 18 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Assistant Secretary Jeremiah Chan “[a]ppointing Practitioner(s) associated with” Customer Number “82750” as Google’s “attorney(s) or “agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith

1 for the” Mathews ’189 App. At this time, customer Number “82750” listed Mr.
2 Riel (as well as Mr. Sorell) as one of the designated Prosecution Counsel, thereby
3 evidencing that both Mr. Riel and Mr. Sorell were substantively involved in
4 prosecution of the Mathews ’189 App.

5 76. During the time that Mr. Riel was substantively involved with the
6 filing and prosecution of patent applications from Google’s Setup Patent Family
7 (including the Mathews ’337 App. and the Mathews ’189 App.), Mr. Riel was
8 also participating in licensing discussions with Sonos’s counsel. During these
9 licensing discussions, Mr. Riel learned of Sonos’s Setup Patent Family. Yet, Mr.
10 Riel never brought any patent from Sonos’s Setup Patent Family to the attention
11 of the USPTO during prosecution of the Mathews ’337 App. or the Mathews ’189
12 App.

13 77. For instance, on or about February 22, 2019, Sonos sent Mr. Riel
14 (and others at Google) a letter enclosing a link to an electronic repository
15 containing 100 claim charts detailing Google’s infringement of 92 issued Sonos
16 patents and 8 allowed Sonos patents. These 92 issued Sonos patents included
17 additional patents from Sonos’s Setup Patent Family that were continuations of
18 the earlier Sonos setup patents, including U.S. Patent Nos. 8,868,698
19 (“Millington ’698”) and 9,960,969 (“Millington ’969”). Claim charts for
20 Millington ’698 and Millington ’969 detailed Google’s infringement of these
21 patents.

22 78. If he was not already aware of Sonos’s Setup Patent Family, Mr. Riel
23 became aware of Sonos’s Millington ’698 and Millington ’969 patents at this
24 time. Given Mr. Riel’s substantive involvement with the filing and prosecution of
25 Google’s Setup Patent Family, Mr. Riel also became aware of the relevance of
26 Millington ’698 and Millington ’969 to Google’s Setup Patent Family. Despite
27 this, neither Mr. Riel nor Mr. Sorell disclosed Sonos’s Setup Patent Family,
28 including at least Millington ’698, Millington ’969, Millington ’771, or

Millington '951, to the USPTO at this time for consideration during prosecution of the Mathews '337 App.

79. Four months later, on or about June 11, 2019, Alaina Kwasizur, Chris Butts, and Mark Triplett of Sonos met with Mr. Riel and others at Google to again discuss the need for Google to license Sonos's patents. During this discussion, Sonos reiterated that it had patents disclosing techniques for "device setup." In particular, Sonos pointed again to Millington '969, explaining that this patent had a priority date of June 2004 and involved technology for setting up a payback device onto a network. Ex. 139 (annotated). Despite this, Mr. Riel did not bring Millington '969 to the attention of the USPTO at this time for consideration during prosecution of the Mathews '337 App.

	Max (17 of 25)	Home, Hub, Mini (9 of 16)	Chromecast (9 of 15)
Playback Device (Standalone)			
Playback Device Setup	setup	Setup	setup
Wi-Fi Streaming	cloud queue	cloud queue	cloud queue
Support for only one streaming service	service switch	service switch	service switch
Support for multiple streaming services	direct (Bluetooth switch)	direct (Bluetooth switch)	direct (Bluetooth switch)
Line-in			
Line-out			
Bluetooth			
Control Interface (SW)	guest access	guest access	guest access
Control Interface (HW)	direct control	direct control	direct control
Power and Power Management	power save		
Fault Detection/Recovery	fault based on orientation		
Features Update (SW)			
Voice Assistant Device			
Smart Assistant			
Voice Detection	mic based on orientation		
Multi-device Platform			
Multi-device Playback Control (SW)	grouping/synchronization	grouping/synchronization	grouping/synchronization
	group volume	group volume	group volume
	zone scenes	zone scenes	zone scenes
	direct control to group	direct control to group	direct control to group
	group ID	group ID	group ID
Multi-device Playback (SW)	grouping/synchronization	grouping/synchronization	grouping/synchronization
Multi-device Voice	default device	default device	default device
	meta data channel	meta data channel	meta data channel
Smart-home Integration			
Multi-device Networking	GC selection	GC selection	GC selection
	GC switching	GC switching	GC switching
Premium Sound			
Orientation	sound based on orientation		
Bonded Zones	bonded pair		
Custom Transducers			
Calibration	self calibration		
Lossless Streaming			
Sound Field Control	multi-channel sound field		
Custom Amplifiers			
Enclosure			

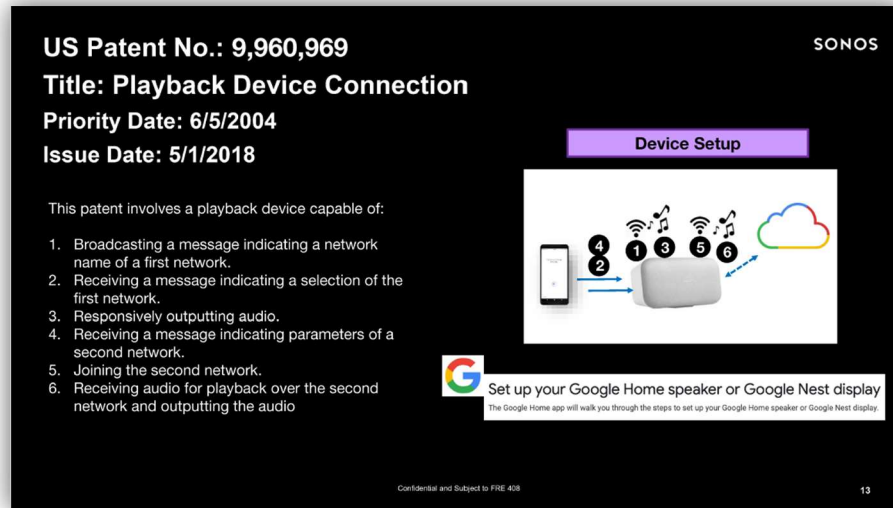
Device Setup
2 patents
+pending

**Control Interface
(Direct Control)**
10 patents
+pending

**Multi-Device Playback
(Synchronization)**
10 patents
+pending

Confidential and Subject to FFE 408

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Ex. 139.

80. Six months later, on December 9, 2019, Google filed the Mathews '189 App. Messrs. Riel and Sorell were involved in the decision to file this application but neither brought Sonos's Millington '698 or Millington '969 Patents to the attention of the USPTO at this time for consideration during prosecution of the Mathews '189 App.

81. The following month, on January 6, 2020, Ms. Kwasizur at Sonos sent to Mr. Riel a courtesy copy of Sonos's International Trade Commission Complaint, Sonos's U.S. District Court complaint (Dkt. 1 in this matter), and claim charts detailing Google's infringement of five Sonos patents, including Millington '896. Exs. 140, 141, 142, 143, 144. As a result, if he was not already aware, Mr. Riel became aware of Millington '896 at this time.

82. The International Trade Commission Complaint and Sonos's District Court Complaint (Dkt. 1) contained several paragraphs devoted to explaining the disclosure of Millington '896. Though this explanation, if he was not already aware, Mr. Riel learned of the relevance of Millington '896 to Google's Setup

1 Patent Family and specifically, the Mathews '180 App. As an example, the
2 International Trade Commission Complaint stated:

3
4 90. The '896 Patent relates generally to devices, methods, and
5 computer-readable media for connecting a zone player (or
6 playback device) to a secure wireless local area network (WLAN),
7 thereby setting up the zone player for use in a networked audio
8 system.

9
10 91. The '896 Patent recognized problems with conventional
11 device-setup technology for connecting "consumer electronic
12 devices" (e.g., "home entertainment products") to a network. *See*,
13 e.g., '896 Patent at 1:37-67. For instance, "[c]onsumer electronic
14 devices that operate using wireless or wired Ethernet standards are
15 often subject to the same complicated set-up process as a wireless
16 computer network." *Id.* at 1:37-39.

17
18 92. Indeed, a conventional setup process typically required "the
19 person who sets up the wireless network [to] have at least some
20 knowledge about IP (Internet Protocol) networking and Ethernet
21 (e.g., 802.3, 802.11), such as addressing, security, broadcast,
22 unicast, etc." '896 Patent at 1:40-43. Thus, to connect a computer
23 to a wireless network, "the user [had] to know what type of
24 network the computer [was] going to be connected to," which was
25 a "difficult question [for] the average consumers" to answer. *Id.*
26 at 1:57-63. Moreover, there were additional "questions or options
27 related to [] security settings [] which evidently require[d] some
28 good understanding about the network security over the wireless
network." *Id.* at 1:63-67. The '896 Patent recognized that it was
"impractical to require average consumers to have such knowledge
to hook up consumer electronic devices, such as home
entertainment products that use wireless/wired Ethernet
connectivity." *Id.* at 1:46-49.

93. The '896 Patent also recognized that a device that has yet to be
setup on a network has limited networking capability and is not
addressable by other devices, which presents technical challenges
as to how that device can receive information that facilitates the

1 device's setup to operate on the network. *See, e.g.*, '896 Patent at
2 11:4-14.

3
4 94. Thus, the '896 Patent recognized there was "a clear need to
5 create simple methods of setting up and maintaining a secure
6 wireless/wired in-home network with minimum human
7 interventions." *Id.* at 2:1-4.

8
9 95. In this regard, the '896 Patent is directed to a computing device
10 comprising a graphical user interface (GUI) associated with an
11 application for controlling one or more playback devices and that
12 is configured to facilitate setting up a playback device to operate
13 on a secure wireless local area network (WLAN). Further, the
14 '896 Patent is directed to a computing device configured to (i)
15 while operating on a secure WLAN defined by an access point, (a)
16 receive user input indicating that a user wishes to set up a playback
17 device to operate on the secure WLAN and (b) receive a first
18 message indicating that a given playback device is available for
19 setup, (ii) transmit a response to the first message that facilitates
20 establishing with the given playback device an "initial
21 communication path" that does not traverse the access point,
22 (iii) transmit, to the given playback device via the initial
23 communication path, a second message containing network
24 configuration parameters for the secure WLAN, and (iv) after
25 detecting an indication that the given playback device has
26 successfully received the network configuration parameters,
27 transition from communicating with the given playback device via
28 the initial communication path to communicating with the given
playback device via the secure WLAN. *See, e.g.*, '896 Patent at
Claims 1, 13, 20.

Ex. 144, ¶¶ 90-95.

83. Given this explanation, and given Mr. Riel's substantive involvement
with the filing and prosecution of Google's Setup Patent Family, Mr. Riel became
aware of the relevance of Millington '896 to Google's Setup Patent Family at this
time if he was not already aware. Despite this, Mr. Riel did not bring

Millington '896 to the attention of the USPTO at this time for consideration during prosecution of the Mathews '189 App.

84. Four months later, on or about April 14, 2020, a new claim was submitted in the Mathews '189 App. This new claim was substantially similar to the claims of Millington '896 (including the description contained in paragraph 95 of the International Trade Commission complaint), which Sonos just recently brought to Mr. Riel's attention and accused Google of infringing.

85. A comparison of this newly proposed claim (which ultimately issued as claim 1 of Mathews '615) to one of Sonos's issued claims from Millington '896 is below.

Google's '615 Patent Issued claim 1 (priority 4/11/2012) (claim introduced 4/1/2020)	Sonos's Millington '896 Patent Claim 20 (priority 6/5/2004) (claim issued 10/8/2019)
A method for commissioning a target device onto a communication network, comprising:	A method comprising:
at the target device including a microprocessor, a wireless radio, and commissioning logic: receiving a request to initiate a commissioning process with the target device;	while operating on a secure wireless local area network (WLAN) that is defined by an access point, (a) receiving, via a graphical user interface (GUI) associated with an application for controlling one or more playback devices, user input indicating that a user wishes to set up a playback device to operate on the secure WLAN and (b) receiving a first message indicating that a given playback device is available for setup;
establishing a short-range signal transmission path with a wireless device independently of the communication network;	after receiving the user input and receiving the first message, transmitting a response to the first message that facilitates establishing an initial communication path with the given playback device, wherein the initial communication path with the given playback device does not traverse the access point;

1 in response to receiving the request, 2 receiving one or more network 3 configuration packets from the wireless 4 device via the short-range signal 5 transmission path, wherein the one or 6 more network configuration packets 7 convey network configuration data 8 associated with the communication 9 network according to a predetermined 10 data format, the network configuration 11 data including at least a security 12 passphrase for accessing the 13 communication network;	transmitting, to the given playback device via the initial communication path, at least a second message containing network configuration parameters, wherein the network configuration parameters comprise an identifier of the secure WLAN and a security key for the secure WLAN;
13 executing an application on the target 14 device to decode and process the one or 15 more network configuration packets and 16 recover the network configuration data; and	after transmitting at least the second message containing the network configuration parameters, detecting an indication that the given playback device has successfully received the network configuration parameters
17 after receiving the network 18 configuration packets, employing via 19 the wireless radio the network 20 configuration data conveyed in the one 21 or more network configuration packets 22 to enable the target device to join the 23 communication network.	after detecting the indication, transitioning from communicating with the given playback device via the initial communication path to communicating with the given playback device via the secure WLAN that is defined by the access point.

86. Despite the now-glaring similarity between Google's pending Mathews '189 App. and Sonos's Millington '896, which has a priority date eight years prior to the earliest claimed priority date of the Mathews '189 App., Mr. Riel *still* did not bring Millington '896 to the attention of the USPTO at this time for consideration during prosecution of the Mathews '189 App.

87. The Mathews '189 App. issued as Mathews '615 on June 29, 2021. Just prior to this issuance, Google filed another continuation application claiming priority to the Mathews '189 App. This continuation application was assigned U.S. Application No. 17/337,579 ("Mathews '579 App."), would ultimately issue as Mathews '608, and be asserted against Sonos in this case.

1 88. Both Mr. Riel and Mr. Sorell were substantively involved in
2 prosecution of the Mathews '579 App.

3 89. During the filing and prosecution of the Mathews '579 App., Mr.
4 Riel and Mr. Sorell were knowledgeable about the content of this application,
5 contributed to the decision to file this application, and contributed to claim
6 drafting strategy for this application. Mr. Riel and Mr. Sorell were
7 knowledgeable about the prosecution of the Mathews '579 App., reviewed and
8 approved draft submissions to the USPTO, and reviewed and approved draft
9 claim amendments submitted during prosecution of the Mathews '579 App.
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90. Further evidencing that Mr. Sorell was substantively involved in prosecution of the Mathews '579 App. is that Mr. Riel appeared as one of the registered patent attorneys associated with the customer number designated as Prosecuting Counsel by the power of attorney filed in the Mathews '579 App. In particular, on June 3, 2021, Shaun Gregory at Butzel Long filed a power of attorney executed by Michael Lee at Google "[a]ppointing Practitioner(s) associated with" Customer Number "16621" as Google's "attorney(s) or

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Document Description: Power of Attorney

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POWER OF ATTORNEY BY APPLICANT

I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

Application Number	Filing Date

(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☒ I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above: **16621**

OR

☐ I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

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☒ The address associated with the above-mentioned Customer Number

OR

☐ The address associated with Customer Number: _____

OR

Firm or Individual Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Country: _____

Telephone: _____ Email: _____

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

Google LLC

☐ Inventor or Joint Inventor (title not required below)

☐ Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)

☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)

☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature: _____ Date (Optional): 8/22/2020

Name: Michael Lee

Title: Authorized Signatory of Google LLC

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ Total of _____ forms are submitted.

This collection of information is required by 37 CFR 1.131, 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 guaranteed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is authorized to take 2 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 1400, Alexandria, VA 22313-1400. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1400, Alexandria, VA 22313-1400.

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

"agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the" Mathews '579 App. At this time, Customer

1 Number “16621” listed Mr. Sorell as one of the designated Prosecution Counsel,
2 thereby evidencing that Mr. Sorell was substantively involved in prosecution of
3 the Mathews ’579 App.

4 91. On information and belief, Customer Number “16621” also listed
5 Mr. Riel as one of the designated Prosecution Counsel, thereby evidencing that
6 Mr. Riel was also substantively involved in prosecution of the Mathews ’579
7 App.

8 92. Subsequently, another power of attorney was filed in the
9 Mathews ’579 App. “[a]ppointing Practitioner(s) associated with” Customer
10 Number “149118” as Google’s “attorney(s) or “agent(s), and to transact all
11 business in the United States Patent and Trademark Office connected therewith
12 for the” Mathews ’579 App. At this time, Customer Number “149118” listed Mr.
13 Sorell as one of the designated Prosecution Counsel, thereby evidencing that Mr.
14 Sorell was substantively involved in prosecution of the Mathews ’579 App.

15 93. On information and belief, Customer Number “149118” also listed
16 Mr. Riel as one of the designated Prosecution Counsel, thereby evidencing that
17 Mr. Riel was also substantively involved in prosecution of the Mathews ’579
18 App.

19 94. As shown below, claim 1 of Mathews ’608 is nearly identical to
20 claim 1 of Mathews ’615, with the key difference being that Google added the
21 highlighted limitation to claim 1 of Mathews ’608, which recites “*providing a*
22 *visual indication that indicates the commissioning process is complete.*”

Google’s Mathews ’615 Patent Claim 1	Google’s Mathews ’608 Patent Claim 1
1. A method for commissioning a target device onto a communication network, comprising:	1. A method for commissioning a target streaming media device onto a communication network,

at the target device including a microprocessor, a wireless radio, and commissioning logic;	the target streaming media device including a microprocessor, a wireless radio, and commissioning logic, the method comprising:
receiving a request to initiate a commissioning process with the target device;	receiving, by the target streaming media device, a message to initiate a commissioning process with the target streaming media device;
establishing a short-range signal transmission path with a wireless device independently of the communication network;	establishing a short-range signal transmission path with a wireless device independently of the communication network;
in response to receiving the request, receiving one or more network configuration packets from the wireless device via the short-range signal transmission path, wherein the one or more network configuration packets convey network configuration data associated with the communication network according to a predetermined data format, the network configuration data including at least a security passphrase for accessing the communication network;	after receiving the message, receiving one or more network configuration packets from the wireless device via the short-range signal transmission path, the one or more network configuration packets conveying network configuration data associated with the communication network according to a predetermined data format, the network configuration data including at least a security configuration data for accessing the communication network;
executing an application on the target device to decode and process the one or more network configuration packets and recover the network configuration data; and	executing the commissioning logic on the target streaming media device to decode and process the one or more network configuration packets and recover the network configuration data;
after receiving the network configuration packets, employing via the wireless radio the network configuration data conveyed in the one or more network configuration packets to enable the target device to join the communication network.	after receiving the network configuration packets, employing via the wireless radio the network configuration data conveyed in the one or more network configuration packets to enable the target streaming media device to join the communication network; and
	providing a visual indication that indicates the commissioning process is complete.

95. During prosecution of Mathews '608, the Examiner had rejected a prior version of claim 1 as being obvious over the prior art. It was not until

1 Google added the highlighted limitation to claim 1 that the Examiner conceded
2 that he was unable to find this limitation disclosed in the prior art such that he
3 could formulate a rejection and thus allowed the claims based on this limitation
4 being added to claim 1.

5 **C. Google Asserts Mathews '615 But Fails to Cite Material**
6 **Information Stemming from These Proceedings in the Mathews**
7 **'579 App.**

8 96. On August 9, 2022, Google filed an ITC Complaint against Sonos
9 asserting Mathews '615, among other unrelated patents, despite the fact that
10 Mathews '615 issued while Mr. Riel had intentionally failed to bring to the
11 attention of the Examiner any patent from Sonos's Setup Patent Family, including
12 Millington '896 or Millington '951.

13 97. During this ITC Investigation and during the pendency of the
14 Mathews '579 App., Sonos served on Google (i) its allegations that Mathews '615
15 was unenforceable due to inequitable conduct committed by Mr. Riel for failing to
16 disclose Millington '896, Ex. 145, and (ii) invalidity contentions detailing how
17 certain prior art, including Millington '951 disclosed or rendered obvious the
18 claims of Mathews '615, Ex. 146.

19 98. Sonos's inequitable conduct allegations set forth, and were based on,
20 the same set of facts concerning Mr. Riel as set forth above. *Compare supra*, ¶¶
21 65-86 *with* Ex. 145

22 99. Sonos's invalidity contentions did not just cite prior art, such as
23 Millington '951. Rather, Sonos's invalidity contentions provided an explanation
24 of how the claims of Mathews '615 were anticipated and/or rendered obvious by
25 the prior art. In effect, these contentions were a roadmap detailing the relevance
26
27
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of the asserted prior art, including how Sonos's Setup Patent⁷ anticipated and/or rendered obvious the claims of Mathews '615. Ex. 146.

100. As one example, Sonos’s invalidity contentions explained that claim 9 of the Mathews ’615, which recited the step of “*generating one of a visual*

Exhibit D-3	
U.S. Patent No. 11,050,615 B2	
U.S. Patent No. 11,050,615	
Claim 9	Millington
[9] The method of claim 1,	Millington discloses the method of claim 1, further comprising: generating one of a visual
further comprising:	indication and an audio indication to a user (e.g., set LED indicators to alternatively flashing white
generating one of a visual	= green") about a status of the commissioning process (e.g., the "automatic" configuration
indication and an audio	process)".
indication to a user about a	
status of the commissioning	16:37-39: The automatic configuration process, as described above, is executed. After it is
process.	completed, a message or an indication of completion is displayed.
	16:57-58: If the zone player is never configured, the process 450 goes to 456 to indicate such.
	16:51-60: When a zone player is powered up, the process 450 determines whether the zone player
	is already registered or configured at 452. There are situations in which the zone player just
	obtained by a user is already configured, for example, the zone player is a used one (i.e.,
	previously configured). If it is indeed configured, the process 450 goes to 454 where an indication
	of "registered" is shown. If the zone player is never configured, the process 450 goes to 456 to
	indicate such. It is assumed that the zone player works normally at 458 (e.g., through an internal
	checkup).
FIG 4B:	

Page 39 of 58

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graph TD
    450[Power on ZP] --> 452{is Reg.  
ZP registered?}
    452 -- Yes --> 454[Activate "Registered" indicator  
(solid white LED) and join network  
(with the ZP's expected name  
(even if already used))]
    452 -- No --> 456[Activate Test  
Registration of  
indicator  
(simultaneously  
flashing white and  
green LEDs)  
and set to default  
mode]
    456 --> 458{ZP  
operating  
normally?}
    458 -- No --> 460{ZP is Multi  
practitioner  
specifier?}
    458 -- Yes --> 462[Send "Alive" message  
with HLRID if present  
either "Awake/Registered"  
mode, set LED indicators  
to alternating flashing  
white + green]
    460 -- Yes --> 462
    460 -- No --> 464{is "no  
response"?}
    464 -- No --> 466[Reset indicator lights to  
previous state "Registered"  
or "Test Registration"]
    464 -- Yes --> 468{is "Join  
Household"  
multipoint involved  
from ZP or PNC?}
    468 -- No --> 464
    468 -- Yes --> 454
  
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FIG. 4B

Millington discloses alternating LED indicators depending on the status of the commissioning. For example, "Registered" (solid white LED), "Not Registered" (simultaneously flashing white and green LEDs), "Await Registration" (alternatively flashing white and green LEDs) are each commissioning states that generate different visual LED indicators.

To the extent this limitation is not found, either expressly or inherently, in Millington, this limitation would have been obvious to a POSITA based on (1) this reference alone in view of the knowledge of one of ordinary skill in the art; and/or (2) this reference in combination with the teachings as detailed in the other invalidity charts for this claim including Richter E. and, specifically, Yamaha Musicians' Club, supra v. 0, Roberts, and Gupta.

Page 40 of 58

⁷ In these invalidity contentions, Sonos asserted its U.S. Pat. No. 8,326,951 (“Millington ’951”) as prior art. Millington ’951 was the first non-provisional patent application and issued patent in the Sonos Setup Patent Family. Millington ’896 shares the specification of Millington ’951 and claims priority to Millington ’951 through a chain of continuation applications.

1 *indication and an audio indication to a user about a status of the commissioning*
2 *process”* was disclosed by at least Millington ’951. Ex. 146 at 39-41.

3 101. In fact, Sonos’s invalidity contentions pointed out that
4 Millington ’951 disclosed the step of “*generating one of a visual indication and*
5 *an audio indication to a user about a status of the commissioning process”*
6 because Millington ’951 disclosed “*alternating LED indicators depending on the*
7 *status of the commissioning. For example, ‘Registered’ (solid white LED), ‘Not*
8 *Registered’ (simultaneously flashing white and green LEDs), ‘Await Registration’*
9 *(alternatively flashing white and green LEDs) are each commissioning states that*
10 *generate different visual LED indicators.”* Ex. 146 at 39-41.

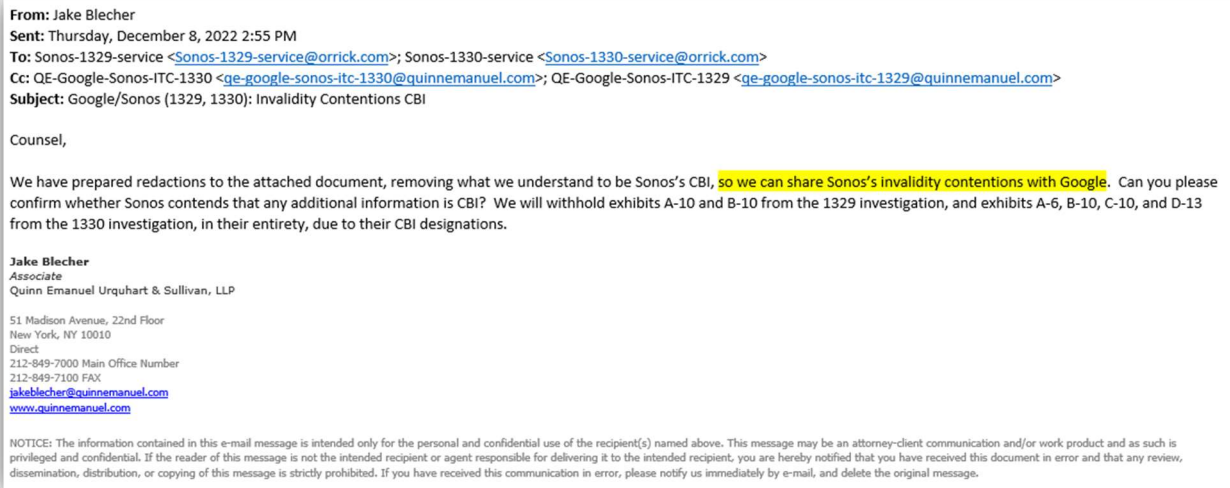
11 102. In this way, Millington ’951 not only disclosed the broader limitation
12 in claim 9 of Mathews ’615 of “*generating one of a visual indication and an*
13 *audio indication to a user about a status of the commissioning process”* but also
14 the narrower limitation that Google added to claim 1 of Mathews ’608 of
15 “*providing a visual indication that indicates the commissioning process is*
16 *complete.”* Specifically, at least the disclosure in Millington ’951 of “*‘Registered’*
17 *(solid white LED)”* amounts to “*a visual indication that indicates the*
18 *commissioning process is complete.”* Sonos’s invalidity contention, which
19 specifically highlighted this disclosure in Millington ’951 and mapped it to the
20 relevant claim limitation of Mathews ’615 provided a roadmap to the relevance of
21 Millington ’951.

22 103. Sonos provided its inequitable conduct allegations to Google in its
23 response to Google’s ITC Complaint on October 5, 2022. Ex. 145.

24 104. Sonos served its invalidity contentions on December 7, 2022 and
25 supplemented them on January 25, 2023.

26 105. Counsel for Google shared with Google non-confidential portions of
27 these invalidity contentions, which included Sonos’s contentions concerning
28 Millington ’951. This was confirmed to Sonos via an email from Google’s

1 counsel indicating that they intended to share Sonos's invalidity contentions with
2 Google. Mr. Riel and/or Mr. Sorell became aware of Sonos's invalidity



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13 contentions and Sonos's allegations of inequitable conduct due at least in part to
14 their position within Google and their knowledge of the Google ITC Investigation
15 against Sonos and/or as a result of Google's counsel sharing it with Google in-
16 house counsel, including directly or indirectly, Mr. Riel and/or Mr. Sorell.

17 106. Shortly after Sonos served these invalidity contentions, on March 10,
18 2023, Matthew Johnson at Colby Nipper PLLC filed an information disclosure
19 statement (IDS) in the Mathews '579 App. citing Millington '951. However, Mr.
20 Johnson did not cite Sonos's invalidity contentions, which would have provided
21 the USPTO with a roadmap to the relevance of Millington '951 – particularly,
22 because Millington '951 disclosed the very limitation that the Examiner was
23 unable to locate in the prior art and would have resulted in the Examiner refusing
24 to issue the Mathews '189 App. as Mathews '608.

25 107. Mr. Johnson also did not cite Sonos's allegations that Mr. Riel
26 committed inequitable conduct during prosecution of Mathews '615 for failing to
27 cite Millington '896 or Millington '951. Mr. Riel also did not disclose to the
28 USPTO Sonos's allegations of inequitable conduct despite that he was the

1 individual accused of inequitable conduct and despite that he was still
2 substantively involved in prosecution of the Mathews '579 App. These
3 allegations would have provided a roadmap to the relevance of Millington '951
4 and would have signaled to the USPTO that it should carefully evaluate the
5 patentability of the claims of the Mathews '579 App. in view of Millington '951.

6 108. The MPEP specifically explains that this type of information – both
7 Sonos's invalidity contentions and Sonos's allegations of inequitable conduct –
8 ***“must be brought to the attention of the examiner or other appropriate official***
9 ***at the U.S. Patent and Trademark Office.*** . . Examples of such material
10 information include evidence of possible prior public use or sales, questions of
11 inventorship, prior art, ***allegations of ‘fraud,’ ‘inequitable conduct,’ and***
12 ***‘violation of duty of disclosure.’***” MPEP 2001.06(c) (explaining that “[w]here the
13 subject matter for which a patent is being sought is or has been involved in
14 litigation and/or a trial proceeding, or the litigation and/or trial proceeding yields
15 information material to currently pending applications, the existence of such
16 litigation and any other material information arising therefrom must be brought to
17 the attention of the examiner or other appropriate official at the U.S. Patent and
18 Trademark Office . . . Such information might arise during litigation and/or trial
19 proceeding in, for example, ***pleadings***, admissions, discovery including
20 ***interrogatories***, depositions, and other documents and testimony.”)

21 109. Because the USPTO did not have the benefit of evaluating Sonos's
22 invalidity contentions or Sonos's allegations of inequitable conduct, the USPTO
23 overlooked the relevance of Millington '951, especially as it pertained to the
24 limitation that the Examiner was unable to locate in the prior art.

25 110. On information and belief, Mr. Johnson was instructed to file an IDS
26 by Google's in-house counsel, including Mr. Riel and/or Mr. Sorell, each of
27 whom received and evaluated Sonos's invalidity contentions and Sonos's
28 allegations of inequitable conduct. On information and belief, Mr. Riel and/or

1 Mr. Sorell instructed Mr. Johnson and/or others at Colby Nipper to file an IDS
2 disclosing the references, including Millington '951, that Sonos cited in its
3 invalidity contentions. However, Mr. Riel and/or Mr. Sorell did not instruct Mr.
4 Johnson to cite Sonos's invalidity contentions or Sonos's allegations of
5 inequitable conduct themselves. Mr. Riel and/or Mr. Sorell intentionally failed to
6 instruct Mr. Johnson and/or others at Colby Nipper to cite Sonos's invalidity
7 contentions in order to prevent the USPTO from evaluating them and discovering
8 the relevance and applicability of Millington '951. Therefore, the facts
9 demonstrate that Mr. Riel and/or Mr. Sorell specifically intended to deceive the
10 USPTO and induce it to issue the Mathews '579 App. without having conducted
11 an evaluation of Sonos's invalidity contentions and Sonos's allegations of
12 inequitable conduct concerning the nearly identical parent patent.

13 111. On April 5, 2023, while the Mathews '579 App. was pending, Sonos
14 filed a petition for *Inter Partes* Review of Mathews '615.⁸ In this Petition, Sonos
15 contended that claims 1-3, 5-12, and 15-19 were obvious over (i) a reference
16 referred to as Roberts in view of a reference referred to as Asokan and (ii) a
17 reference referred to as Suumaki.

18 112. In particular, Sonos explained in the Petition how the combination of
19 Roberts and Asokan discloses or renders obvious each element of, *inter alia*,
20 claim 1 and claim 9 of Mathews '615, and how Suumaki discloses or renders
21 obvious each element of, *inter alia*, claim 1 and claim 9 of Mathews '615.

22 113. As to claim 9 of Mathews '615, which recites “*generating one of a*
23 *visual indication and an audio indication to a user about a status of the*
24 *commissioning process,*” Sonos explained that, in view of Suumaki's disclosure, a
25 “*POSITA would have understood that now-connected status would be indicated*
26 *[to] the user—via a status icon or some other means—on the device's display.*”
27

28 ⁸ Ex. 147 (Petition, IPR2023-00806).

1 In this way, Summaki not only disclosed or rendered obvious the broader
2 limitation in claim 9 of Mathews '615 of “*generating one of a visual indication*
3 *and an audio indication to a user about a status of the commissioning process*”
4 but also the narrower limitation that Google added to claim 1 of the Mathews '608
5 Patent of “*providing a visual indication that indicates the commissioning process*
6 *is complete.*”

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8. Claim 9

“9. The method of claim 1, further comprising: generating one of a visual indication and an audio indication to a user about a status of the commissioning process.”

Suumäki indicates that its devices can include a “display,” “speaker,” or other output device. (Ex. 1005, 23:33-45.) Further, Suumäki explains that once it performs an NFC touch event and has been authenticated by the hub, “device B” will be “connected to the network with its new configuration and may communicate with device A over the network, through the hub device AP/GO.” (*Id.*, 22:39-45.)

A POSITA would have understood that now-connected status would be indicated the user—via a status icon or some other means—on the device’s display. (*See Ex.*

-70-

1003, ¶¶ 477-480.) Suumäki also explains that a “EAP-Failure message” may be sent to a device in the event it is unable to successfully complete the steps needed to join a network. (Ex. 1005, 15:5-12; *see also id.*, 18:38-49.) A POSITA would have considered it obvious that this would similarly be displayed to the user either via a message, or another status icon indicating that there is no network connection. (*See Ex.* 1003, ¶¶ 481-484.)

114. Google filed its Patent Owner Response to Sonos’s Petition on January 30, 2024. Ex. 148. In this response, Google did not argue that Sonos was wrong that at least claims 1 and 9 of Mathews '615 were disclosed by or rendered

1 obvious over (i) Roberts in view of Asokan, and (ii) Suumaki. In fact, Google
2 raised no dispute at all that the cited references disclosed what Sonos contended
3 they disclosed and therefore, invalidated at least claims 1 and 9 of Mathews '615.
4 Rather, Google raised only arguments concerning claims 6 and 19 of
5 Mathews '615. As a result, the PTAB cancelled claims 1-3, 5, 7-12, and 15-18 of
6 Mathews '615 in its Final Written Decision issued November 1, 2024.

7 115. Neither Mr. Sorell nor anyone else involved in prosecution of the
8 Mathews '579 App. brought Sonos's IPR Petition or Google's Response to the
9 attention of the USPTO during prosecution of the Mathews '579 App. To be sure,
10 Mr. Johnson's March 2023 IDS cited the Roberts, Asokan, and Suumaki
11 references themselves because those references were cited by Sonos in Sonos's
12 ITC invalidity contentions. However, Sonos's IPR Petition provided another
13 roadmap highlighting the relevance of Roberts, Asokan, and Suumaki –
14 particularly as to Suumaki's disclosure and a POSITA's understanding of this
15 disclosure as it pertained to the lone limitation in claim 1 of Mathews '579 App.
16 which the Examiner was unable to locate in the prior art, namely "*providing a*
17 *visual indication that indicates the commissioning process is complete.*" Thus,
18 had the Examiner had the benefit of evaluating Sonos's Petition specifically
19 pointing out how and why Roberts, Asokan, and Suumaki disclosed this
20 limitation, as well as the remainder of the limitations of claim 1 of Mathews '615,
21 the USPTO would not allowed the claims of the Mathews '579 App.

22 116. Moreover, it was material to patentability of the Mathews '579 App.
23 that Google did not even bother to dispute that Roberts, Asokan, and Suumaki
24 disclosed or rendered obvious claims 1 and 9 of Mathews '615, and thereby
25 conceded that Roberts, Asokan, and Suumaki disclosed or rendered obvious these
26 claims.

27 117. Mr. Sorell was aware of Sonos's IPR Petition. Due to his position
28 within Google and awareness of ongoing disputes between Google and Sonos,

1 including the Google ITC Investigation against Sonos, Mr. Sorell became aware
2 of Sonos's IPR Petition at least before January 2024.

3 118. At least Mr. Sorell and/or Mr. Johnson evaluated Sonos's IPR
4 Petition in order to determine whether the IPR Petition cited references that had
5 not yet been cited in the Mathews '579 App. One or both of these individuals
6 concluded that all three references cited in Sonos's IPR Petition were previously
7 cited in the March 2023 IDS. However, at least Mr. Sorell knowingly failed to
8 cite Sonos's IPR Petition and Google's Response, which conceded that claims 1
9 and 9 of Mathews '615 were disclosed or rendered obvious by the cited art, which
10 would have provided a roadmap detailing the relevance of Roberts, Asokan, and
11 Suumaki. As the facts demonstrate, at least Mr. Sorell specifically intended to
12 deceive the USPTO into allowing the Mathews '579 App. by knowingly failing to
13 cite Sonos's IPR Petition and Google's Response.

14 119. Worse, over the course of prosecution of the Mathews '579 App.,
15 neither Mr. Riel, nor Mr. Sorell made any attempt to amend the claims of the
16 Mathews '579 App. to avoid what they unquestionably knew by this point was
17 invalidating prior art. Mr. Riel and Mr. Sorell therefore knew that they, and
18 Google, were prosecuting invalid claims.

19 120. Thus, (i) Mr. Riel and/or Mr. Sorell were now aware of
20 Motorola '671, Millington '951, Roberts, Asokan, Suumaki, Sonos's contentions
21 concerning Millington '951, Sonos's IPR concerning Roberts, Asokan, Suumaki,
22 and Sonos's allegations that Mr. Riel committed inequitable conduct during
23 prosecution of Mathews '615, (ii) Mr. Riel and/or Mr. Sorell made no attempt to
24 amend the claims to avoid this invalidating prior art, and (iii) made no attempt to
25 inform the USPTO that Sonos contended that Millington '951, Roberts, Asokan,
26 and Suumaki invalidated nearly identical claims to claim 1 of the Mathews '579
27 App., or inform the USPTO that Sonos alleged that Mr. Riel committed
28 inequitable conduct in Mathews '615 for failing to cite Millington '951. Given

the foregoing, the single most reasonable inference drawn from Mr. Riel's and Mr. Sorell's behavior is that Mr. Riel and Mr. Sorell intended to deceive the USPTO into issuing Mathews '608.

THE UNDISCLOSED REFERENCES ARE MATERIAL TO PATENTABILITY OF MATHEWS '790 AND MATHEWS '608

A. Mathews '790

121. Motorola '671 is material to patentability of Mathews '790 because Motorola '671 discloses expressly or inherently each and every element of claim 1 of Mathews '790 patent. The chart below demonstrates this.

Mathews '790 Claim 1	Motorola '671
1. A method for commissioning a target device onto a wireless local area network (WLAN), comprising:	Motorola '671 discloses such a method as set forth in the claim elements below. <i>See, e.g.,</i> Motorola '671, Abstract ("A wireless networking system and method for wireless network configuration of dual mode wireless networking devices, such as a dual mode cordless telephone base station and one or more dual mode wireless network client devices... The dual mode devices wirelessly exchange network configuration data, via their respective radio transceivers, in response to the initiation of a wireless pairing between the devices by an end user. Within each device, the received network configuration data is transferred from the radio transceiver to the wireless network transceiver. The devices then establish a wireless networking communication or networking link, via their wireless network transceivers, based on the network configuration data exchanged therebetween. Upon such link being established, the client device is associated with the base station device and authenticated within the wireless network.").

at the target device including a microprocessor, a plurality of wireless radios, and commissioning logic, wherein the plurality of wireless radios include a first wireless radio and a second wireless radio:

Motorola '671 discloses such a target device (e.g., "client device" depicted in FIG. 3).

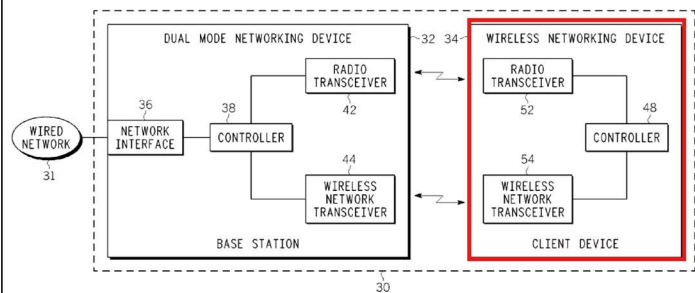


FIG. 3

The disclosed "client device" of Motorola '671 includes a microprocessor (e.g., "controller 48"), a plurality of wireless radios (e.g., "radio transceiver 52" constituting the claimed first wireless radio and "wireless network transceiver 54" constituting the claimed second wireless radio), and commissioning logic. *See, e.g., id.*, 7:9-26 ("The method shown in FIG. 4 described herein may be **implemented in a general, multi-purpose or single purpose processor. Such a processor will execute instructions, either at the assembly, compiled or machine-level, to perform that process.** Those instructions can be written by one of ordinary skill in the art following the description of the wireless networking configuration method described herein and stored or transmitted on a computer readable medium. The instructions may also be created using source code or any other known computer-aided design tool. A computer readable medium may be any medium capable of carrying those instructions and includes random access memory (RAM), dynamic RAM (DRAM), flash memory, read-only memory (ROM), compact disk ROM (CD-ROM), digital video disks (DVDs), magnetic disks or tapes, optical disks or other disks, silicon memory (e.g., removable, non-removable, volatile or non-volatile), packetized or non-packetized wireline or wireless transmission signals.").

receiving from a wireless device in proximity to the target device a request to initiate a commissioning process with the target device;

Motorola '671 discloses this claim element.

For instance, Motorola '671 discloses a wireless device (e.g., the “base station” of FIG. 3) in proximity to the target device.

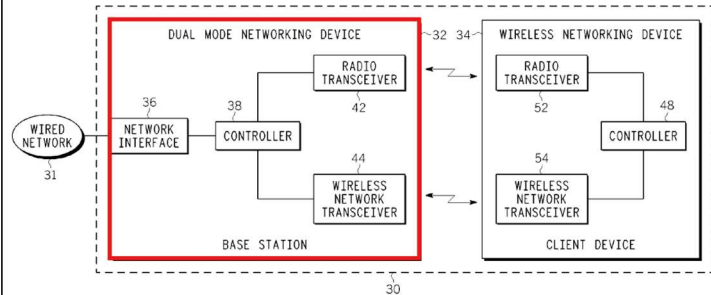


FIG. 3

Motorola '671 also discloses an “initiating step” that “typically involves pressing a button on the base station and/or the client device 34, similar to initiating the registration process between a handset and a base station in a cordless telephony system. Alternatively, the initiating step 62 can include selecting an initiation option from an on-screen menu, or other suitable means for initiating the registration process.” *Id.*, 5:39-45. Motorola '671 further discloses an exchange of messages as part of a “pairing sequence.” *Id.*, 3:1-14 (“Typically, an end user initiates the handset registration process or pairing sequence by pressing one or more buttons on the handset and/or the base station. The pairing sequence typically is performed in accordance with one or more conventional standards, such as the Digital Enhanced (previously European) Cordless Telecommunications (DECT) standard, its North American variant, Worldwide Digital Cordless Telecommunications (WDCT) standard, and the Bluetooth™ wireless standard.”).

establishing a short-range signal transmission path with the wireless device independently of the WLAN, wherein information received at the first wireless radio of the target device is communicated from the wireless device to the target device via the short-range signal transmission path;

Motorola '671 discloses this claim element.

For instance, Motorola '671 discloses that the “base station” establishes a short-range signal transmission path (e.g., Bluetooth path) with the “client device” via each device’s respective “radio transceiver” 42, 52.

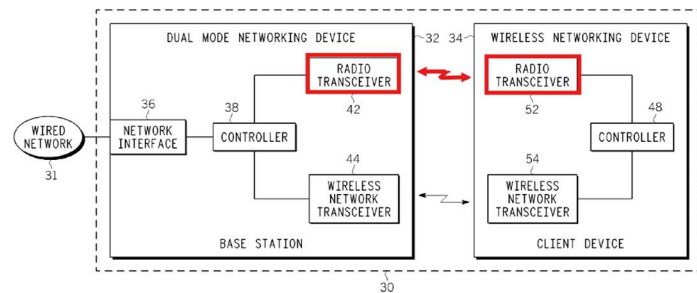


FIG. 3

See also, e.g., *id.*, 3:1-14 (“Before the base station 22 will recognize the handset 24 and be able to communicate therewith, the handset 24 must be registered with the base station 22, e.g., using a pairing sequence, which creates a unique and encrypted or private wireless link between the base station 22 and the handset 24.... The pairing sequence typically is performed in accordance with one or more conventional standards, such as ... the Bluetooth™ wireless standard.”), 5:55-64 (“In the method 60, once the networking configuration process has been initiated, the method 60 performs a step 64 in which a wireless pairing, such as a pairing sequence, is established between the base station device 32 and the client device 34. That is, in general, the step 64 creates or establishes unique and encrypted wireless link between the radio transceiver 42 of the base station device 32 and the radio transceiver 52 of the client device 34. It should be understood that other suitable forms of registration between the base station device 32 and the client device 34 are possible.”).

in response to receiving the request, receiving from the wireless device via the short-range transmission path one or more WLAN configuration packets, wherein the one or more WLAN configuration packets are received at the first wireless radio, and convey WLAN configuration data associated with the WLAN according to a predetermined data format, the WLAN configuration data including at least a security

Motorola '671 discloses this claim element.

For instance, Motorola '671 discloses:

“Once the base station device 32 and the client device 34 device have been wirelessly paired, via their respective radio transceivers, the method 60 performs a step 66 in which the respective controllers of the wirelessly-paired devices exchange network configuration data wirelessly using the respective radio transceivers as the wireless data path. As discussed hereinabove, network configuration data, in general, is information relating to one or more wireless network devices that is needed to authenticate wireless network

1 2 3 4 5 6 7 8	passphrase for accessing the WLAN;	devices and to allow wireless network communication links between the wireless networking devices via their respective wireless network transceivers.” <i>Id.</i> , 6:10-21. Motorola ’671 also discloses: “For example, 802.11x networking devices, network configuration data can include 802.11x configuration data, such as data relating to the name of the wireless network, which is known as its service set identifier (SSID), the channel that is to be used within the wireless network (e.g., the router channel), and one or more security keys.” <i>Id.</i> , 6:26-31.
9 10 11 12 13 14 15 16 17 18 19 20	executing an application on the target device to decode and process by the commissioning logic the one or more WLAN configuration packets and recover the WLAN configuration data; and	Motorola ’671 discloses this claim element. For instance, Motorola ’671 discloses: “Once sufficient network configuration data has been exchanged between the base station 32 and the client device 34, the method 60 performs a step 68 in which the controller or other suitable component or components in each device loads or transfers network configuration data to its respective wireless network transceiver. That is, in the base station 32, any network configuration data received or otherwise accessible by the controller 38 is loaded or transferred from the radio transceiver 42 or other device locations into the device wireless network transceiver 44. Similarly, in the client device 34, network configuration data received or otherwise accessible by the controller 48 is transferred from the radio transceiver 52 or other device locations to the device wireless network transceiver 54.” <i>Id.</i> , 6:36-49.
21 22 23 24 25 26 27 28	after receiving the WLAN configuration packets at the first wireless radio, employing via the second wireless radio the WLAN configuration data conveyed in the one or more WLAN configuration packets to enable the target device to join the WLAN.	Motorola ’671 discloses this claim element. For instance, Motorola ’671 discloses: “The method also includes a step 72 in which the base station 32 and the client device 34, via their respective wireless network transceivers, initiate or establish a wireless communication link or wireless networking link between the devices. The step 72 includes establishing a wireless networking link between the wireless network transceiver 44 and the wireless networking transceiver 54 based on the network configuration data that was received by or otherwise

	accessed by the respective device controllers, e.g., via the loading step 68. The wireless communication or networking link is established to allow the client device 34 to become authenticated by the base station 32 and therefore allowed access to the wireless network to which the base station 32 belongs. Once the client device 34 has been authenticated or associated with the base station 32, i.e., the client device 34 has been recognized as a wireless networking device and allowed access to the wireless network, the method 60 can include a step 74 of confirming authentication of the client device 34 within the wireless network. The confirming step 74 can include any suitable form of confirmation, e.g., an LED, text or graphic display on the client device 34 and/or the base station 32. Alternatively, the confirming step 74 can include one or more audible signals from the client device 34 and/or the base station 32 confirming the recognition of the client device 34 as a wireless networking device within the wireless network.” <i>Id.</i>, 6:63-7:8.
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122. Millington ’951 (and the other patents from Sonos Setup Patent Family, which claim priority to Millington ’951 and share substantively the same specification as Millington ’951) is material to patentability of Mathews ’790 because Millington ’951 discloses expressly or inherently each and every element of claim 1 of Mathews ’790 patent. The chart below demonstrates this.

Mathews ’790 Claim 1	Millington ’951
1. A method for commissioning a target device onto a wireless local area network (WLAN), comprising:	Millington ’951 discloses such a method as set forth in the claim elements below. <i>See, e.g.,</i> Millington ’951, 1:20-22 (“[T]he invention is related to techniques for connecting various devices to a network for secure communications with a minimum of human interaction and technical ability.”), 2:4-12 (“[A]n Ad-hoc (wireless or wired) network is established to facilitate communications among a group of devices. When a new device is added to the network, a rudimentary communication path is initially established between one of the devices in the network (‘first device’) and the new device (‘second device’) such that necessary parameters (e.g., SSID, WEP security, channel frequency) can be exchanged for the second device to function properly in the network.”).

1 at the target device including a
2 microprocessor, a plurality of
3 wireless radios, and
4 commissioning logic, wherein
5 the plurality of wireless radios
6 include a first wireless radio
7 and a second wireless radio:

Millington '951 discloses such a "target device" (e.g., a "zone player") that is configured to carry out the claimed method.

For example, Millington '951 discloses:

"The **zone player 200** includes a **network interface 202**, a **processor 204**, a **memory 206**, an audio processing circuit 210, a digital signal processing module 212, and an audio amplifier 214. The network interface 202 facilitates a data flow between a data network (i.e., the data network 108 of FIG. 1) and the zone player 200 and typically executes a special set of rules (i.e., a protocol) to send data back and forth." *Id.*, 6:18-25.

"The network interface 202 may include either one or both of a **wireless interface 216** and a wired interface 217. The wireless interface 216, also referred to as a RF interface, provides network interface functions by a wireless means for the zone player 200 to communicate with other devices in accordance with a communication protocol (such as the wireless standard IEEE 802.11a, 802.11b or 802.11g)." *Id.*, 6:34-40.

"The processor 204 is configured to control the operation of other parts in the zone player 200. The **memory 206** may be loaded with one or more **software modules** that can be executed by the processor 204 to achieve desired tasks." *Id.*, 6:50-54

Moreover, by the earliest priority date of Mathews '790, a person of ordinary skill in the art ("POSITA") would have found this element obvious at least in view of the admitted prior art disclosed in Mathews '790 and/or Motorola '671. As the Mathews '790 Patent admits, it was well known by 2012 that target devices could utilize multiple wireless radios for communicating with other devices, such as a digital media receiver communicating with an access point via one wireless radio and with a remote controller via a separate "radio wave bus." A POSITA would have, at this time, therefore found it obvious to incorporate such a well-known communication architecture into Millington '951 in order to engage in more efficient communication.

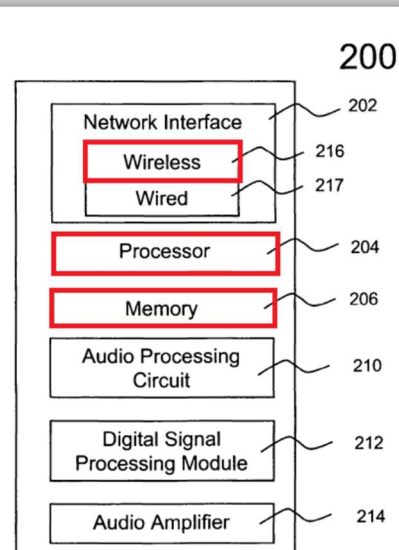
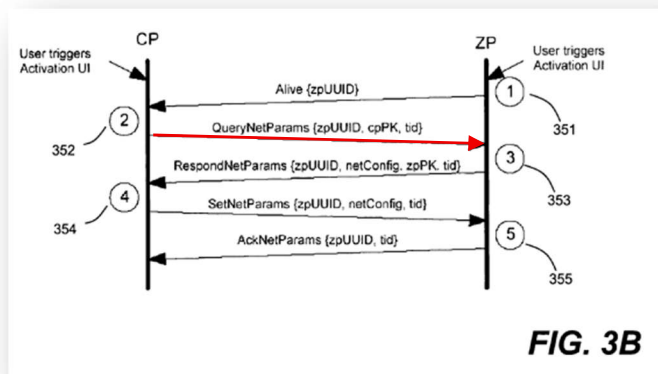
FIG. 2A

FIG. 2A (annotated).

receiving from a wireless device in proximity to the target device a request to initiate a commissioning process with the target device;

Millington '951 discloses this claim element.

For example, Millington '951 discloses a wireless device (e.g., "controller" or "CP") in proximity to the target device (e.g., "zone player" or "ZP").



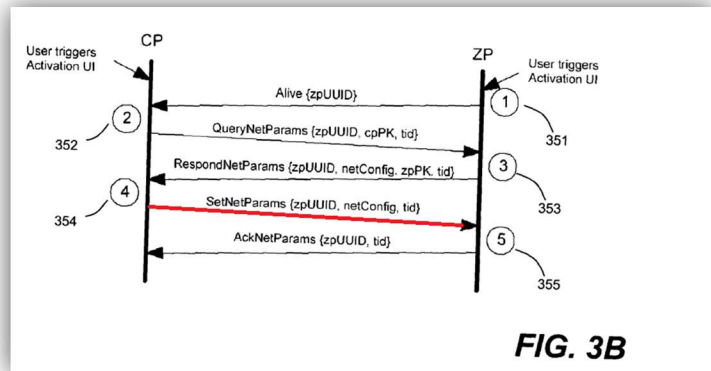
Millington '951 also discloses that "device configuration" is "carried out by exchanging data between two devices that are not necessarily directly connected. This procedure is carried over a rudimentary communication path as described previously. The sequence of exchanging the data is initiated by the user or some other process, for example, activating a

	reset button, to trigger the “activation” or configuration mode on the involved devices. Each device executes this sequence, and then exits the activation mode. FIG. 3B shows an embodiment that involves a process of five exchanges of data.” <i>Id.</i>, 12:37-46. Millington ’951 explains the “QueryNetParams” message is “a request from the CP to the ZP to respond with the ZP’s current network configuration information.” <i>Id.</i>, 12:54-56. And Millington ’951 further explains that the “RespondNetParams” message is “a response to the QueryNetParams” that “includes the ZP’s network configuration information” and “that a new ZP, set to factory defaults, shall have well-known parameter values, allowing the CP to determine that it is unconfigured.” <i>Id.</i>, 12:59-67; <i>see also, e.g., id.</i>, 13:16-55.
establishing a short-range signal transmission path with the wireless device independently of the WLAN, wherein information received at the first wireless radio of the target device is communicated from the wireless device to the target device via the short-range signal transmission path;	Millington ’951 discloses this claim element. For example, Millington ’951 refers to its short-range signal transmission path as a “rudimentary communication path” or an “initial communication path” and describes and illustrates how this path is established between a “zone player”/ “ZP” and “controller”/“CP” independently of the WLAN. <pre> sequenceDiagram participant User as User triggers Activation UI participant CP participant ZP Note over ZP: 1 ZP->>CP: 2 Alive (zpUUID) Note over CP: 352 CP->>ZP: 3 QueryNetParams (zpUUID, cpPK, tid) Note over ZP: 351 ZP->>CP: 4 RespondNetParams (zpUUID, netConfig, zpPK, tid) Note over CP: 354 CP->>ZP: 5 SetNetParams (zpUUID, netConfig, tid) Note over ZP: 353 ZP->>CP: 5 AckNetParams (zpUUID, tid) Note over CP: 355 </pre> FIG. 3B <i>See, e.g., id.</i>, 9:52-14:23. Millington ’951 further discloses that the “rudimentary communication path” may operate over “wireless” protocols, such as IEEE 802.11, and thus, meets the “short-range” requirement⁹ of the claim element. <i>See, e.g., id.</i>, 9:52-10:13 (“Establishing a rudimentary communication path. In reference to FIG. 3A, a zone player is not yet a member of a

⁹ Compare *e.g.*, ’608 Patent, cl. 1 (reciting “establishing a short-range signal transmission path with a wireless device independently of the communication network”), *with* cl. 3 (limiting claim 1 by reciting “wherein the short-range signal transmission path is not a wireless local area network that utilizes protocols based on IEEE 802.11 standards.”).

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	HOUSEHOLD. It is assumed that the zone player is to be added to become a member of the HOUSEHOLD by a cable or wireless. When the zone player is initially turned on, it executes an embedded module that is configured to establish a rudimentary communication path with another device (network-enabled). The rudimentary communication path facilitates the automatic configuration of the zone player via the another device. This communication path may operate over wireless and/or Ethernet protocols, as the zone player may be connected to one or both . . . It should also be noted that the communication path does not have to be direct between two devices and may be bridged by one or more other devices. Because the communication path is only used for initial device configuration, it does not require significant performance or sophisticated functionality. There are at least two elements to establish the communication path: channel selection and packet exchange. Channel Selection. The selection of an appropriate (RF) transmission channel or simply channel is primarily an exercise in two constraints: finding a channel that is quiet from a protocol (e.g., 802.11) viewpoint, i.e., minimal conflicting wireless traffic, and finding a channel that is quiet from an RF viewpoint, i.e., minimal noise from other signals.”).
in response to receiving the request, receiving from the wireless device via the short-range transmission path one or more WLAN configuration packets, wherein the one or more WLAN configuration packets are received at the first wireless radio, and convey WLAN configuration data associated with the WLAN according to a predetermined data format, the WLAN configuration data including at least a security passphrase for accessing the WLAN;	Millington ’951 discloses this claim element. For example, Millington ’951 discloses that the “controller”/“CP” sends a “SetNetParams” message in packet form over the short-range communication path, which includes network configuration data according to a predetermine data format that enables the target “zone player”/ “ZP” to join the WLAN. In one example, this network configuration data includes an SSID of the WLAN and a WEP key, which is a “security passphrase” for accessing the WLAN.



See, e.g., *id.*, 2:4-12 (“[A]n Ad-hoc (wireless or wired) network is established to facilitate communications among a group of devices. When a new device is added to the network, a rudimentary communication path is initially established between one of the devices in the network (‘first device’) and the new device (‘second device’) such that necessary parameters (e.g., SSID, WEP security, channel frequency) can be exchanged for the second device to function properly in the network.”), 10:38-41 (“Packet Exchange. To enable communication between devices that are not part of the same HOUSEHOLD, a packet exchange network infrastructure is developed.”), 10:61-11:59 (describing predetermined format of “packets” including “two flags” in the “message body”), 13:1-7 (“SetNetParams—a command message from the CP to the ZP indicating that the ZP should reconfigure its network parameters. The WEP key is encrypted using the ZP’s public key, and therefore only readable by the ZP. The command includes at least a zpUUID, netConfig and tid. It should be noted that netConfig includes the new configuration parameters for the ZP, as determined by the CP.”), 13:58-67 (“[T]he CP determines that it generates new configuration parameters in accordance with the following: HHID—this is provided by the user via the CP user interface or automatically generated by the CP. SSID—this is automatically generated by the CP (e.g., set to the same value as the HHID). WEP Key—this is automatically generated (e.g., using a pseudo-random number generator, seeded with entropy collected by the CP).”).

executing an application on the target device to decode and process by the commissioning

Millington '951 discloses this claim element.

logic the one or more WLAN configuration packets and recover the WLAN configuration data; and

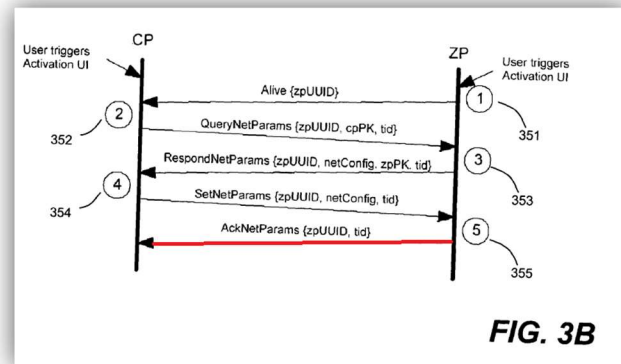
For example, Millington '951 discloses that the "zone player"/"ZP" executes an application to decode and process the received "SetNetParams" packet to recover the network configuration data. The "zone player"/"ZP then uses the recovered network configuration data to join and begin operating on the WLAN.

See, e.g., id., 6:18-19, 8:9-20 ("The zone player 200 includes a network interface 202, a processor 204, a memory 206 The memory 282 may be loaded with one or more application modules 284 that can be executed by the microcontroller 276 with or without a user input via the user interface 278 to achieve desired tasks. In one embodiment, ***an application module is configured to facilitate automatic establishment of a wireless connection with a network or another device.*** In another embodiment, an application module is configured to facilitate automatically configuring itself after communicating with another configured device. It should be noted that similar ***application modules may also be included in the memory 206 of FIG. 2A....***"), 13:1-7 ("SetNetParams-a command message from the CP to the ZP indicating that the ZP should reconfigure its network parameters."), 13:56-58 ("At 355, when the ZP receives a SetNetParams message, it reconfigures its own HHID and WEP key to match those contained in the network packet."), 13:11-15 ("AckNetParams-a response to the SetNetParams messaging. The response indicates that the SetNetParams message was received and that the network configuration contained therein has been successfully applied. The response includes at least a zp UUID and a tid.").

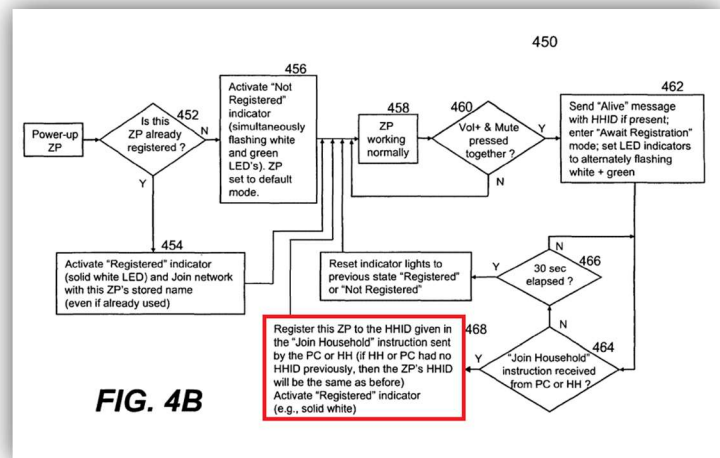
after receiving the WLAN configuration packets at the first wireless radio, employing via the second wireless radio the WLAN configuration data conveyed in the one or more WLAN configuration packets to enable the target device to join the WLAN.

Millington '951 discloses this claim element.

For example, as just explained, Millington '951 discloses that the "zone player"/"ZP" recovers the network configuration data from the "SetNetParams" packet and uses the recovered network configuration data to join and begin operating on the WLAN.



See also, e.g., *id.*, 14:4-7 (“Subsequent to the activation process, any devices that have been reconfigured will attempt to establish normal network communications using their new network configuration parameters.”), 17:3-6 (“[T]he process goes to 468 where the zone player is now part of the wireless network named after an HHID received either from a configured device or provided by itself.”).



B. Mathews ’615

123. Millington ’896 (and the other patents from Sonos Setup Patent Family, which claim priority to Millington ’951 and share substantively the same specification as Millington ’951) is material to the patentability of Mathews ’615 because Millington ’896 Patent discloses expressly or inherently each and every element of claim 1 of Mathews ’615. The chart below demonstrates this.

Mathews '615 Patent Claim 1	Millington '896
A method for commissioning a target device onto a communication network, comprising:	Millington '896 discloses such a method as set forth in the claim elements below. <i>See, e.g.,</i> Millington '896, 1:28-31 (“[T]he invention is related to techniques for connecting various devices to a network for secure communications with a minimum of human interaction and technical ability.”), 2:18-27 (“[A]n Ad-hoc (wireless or wired) network is established to facilitate communications among a group of devices. When a new device is added to the network, a rudimentary communication path is initially established between one of the devices in the network (‘first device’) and the new device (‘second device’) such that necessary parameters (e.g., SSID, WEP security, channel frequency) can be exchanged for the second device to function properly in the network.”). For example, Millington '896 discloses a process that facilitates setting up a target device onto a secure wireless local area network (WLAN).
at the target device including a microprocessor, a wireless radio, and commissioning logic:	Millington '896 discloses such a “target device” (e.g., a “zone player”) that is configured to carry out the claimed method. For example, Millington '896 discloses: “The <i>zone player 200</i> includes a <i>network interface 202</i>, a <i>processor 204</i>, a <i>memory 206</i>, an audio processing circuit 210, a digital signal processing module 212, and an audio amplifier 214. The network interface 202 facilitates a data flow between a data network (i.e., the data network 108 of FIG. 1) and the zone player 200 and typically executes a special set of rules (i.e., a protocol) to send data back and forth.” <i>Id.</i>, 6:36-43. “The network interface 202 may include either one or both of a <i>wireless interface 216</i> and a wired interface 217. The wireless interface 216, also referred to as a RF interface, provides network interface functions by a wireless means for the zone player 200 to communicate with other devices in accordance with a communication protocol (such as the wireless standard IEEE 802.11a, 802.11b or 802.119).” <i>Id.</i>, 6:53-59. “The processor 204 is configured to control the operation of other parts in the zone player 200. The <i>memory 206</i> may be

loaded with one or more *software modules* that can be executed by the processor 204 to achieve desired tasks.” *Id.*, 7:2-6.

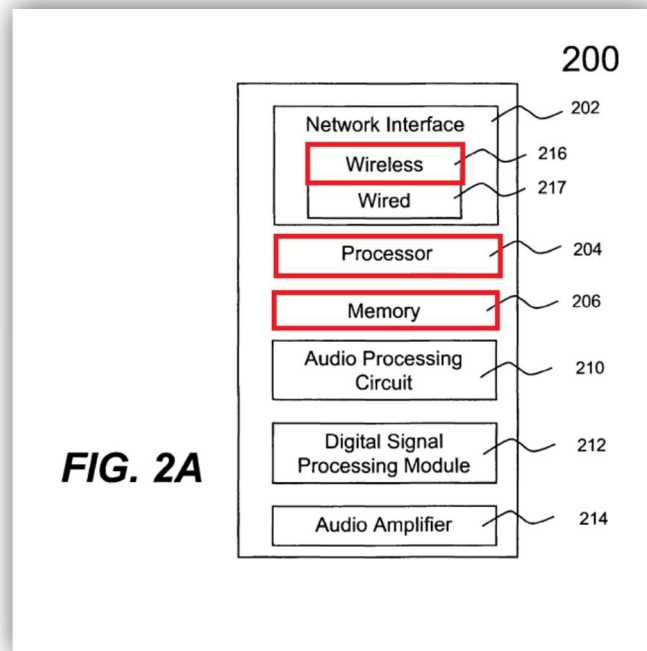
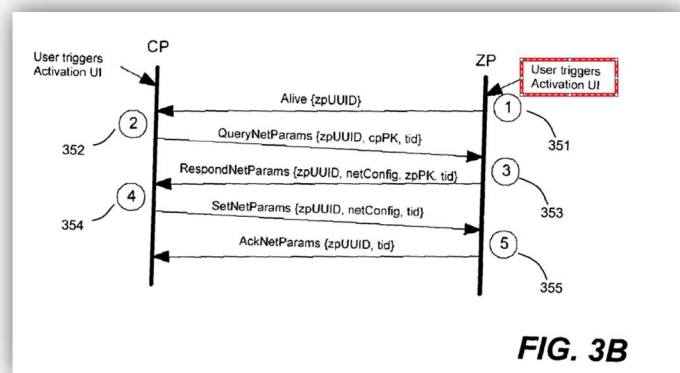


FIG. 2A (annotated).

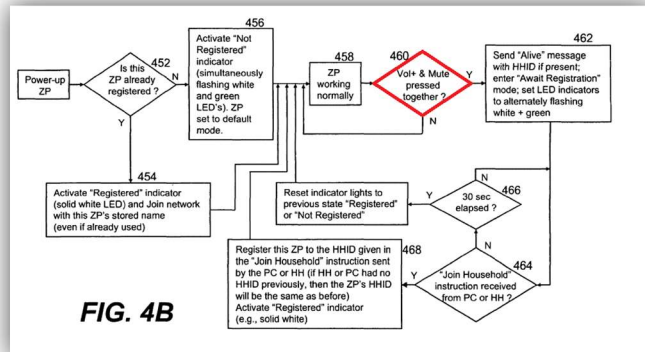
receiving a request to initiate a commissioning process with the target device;

Millington '896 discloses this claim element.

For example, Millington '896 discloses that a “zone player”/“ZP” will receive a request to initiate a commissioning process by, for instance, a user pressing buttons on the “zone player.”

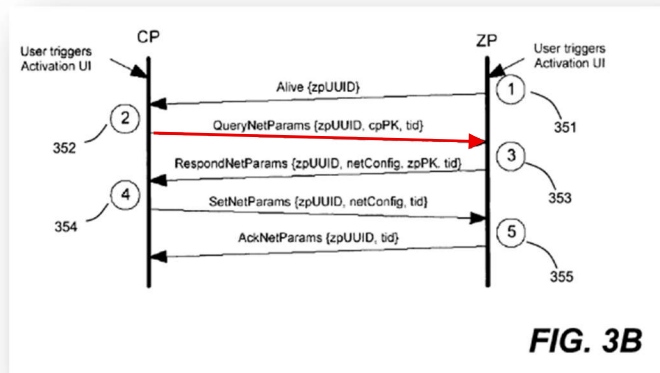


See, e.g., *id.*, 13:43-48 (“In operation, after a user activates the configuration process (on both ZP and CP) at 351 in FIG. 3B. The CP enters a state where it is willing to accept an Alive message ... The ZP enters an activation state where it attempts rendezvous with a CP.”).



Id., 17:25-29 (“At 460, a user activates the automatic configuration process by, for example, pressing two buttons, labeled respectively as ‘VOL’ and ‘Mute’, at the same time. The automatic configuration process starts by sending out an Alive message at 462 as described above.”).

As another example, Millington ’896 discloses that a “zone player”/“ZP” will receive a request to initiate a commissioning process from a wireless device (e.g., “controller” or “CP”) in proximity to the “zone player”.



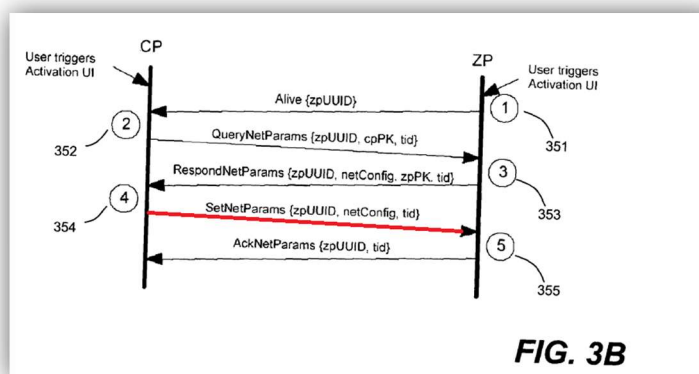
In this regard, Millington ’896 discloses that “device configuration” is “carried out by exchanging data between two devices that are not necessarily directly connected. This procedure is carried over a rudimentary communication path as described previously. The sequence of exchanging the data is initiated by the user or some other process, for

	example, activating a reset button, to trigger the “activation” or configuration mode on the involved devices. Each device executes this sequence, and then exits the activation mode. FIG. 3B shows an embodiment that involves a process of five exchanges of data.” <i>Id.</i>, 12:36-46. Millington ’896 explains the “QueryNetParams” message is “a request from the CP to the ZP to respond with the ZP’s current network configuration information.” <i>Id.</i>, 12:54-56. And Millington ’896 further explains that the “RespondNetParams” message is “a response to the QueryNetParams” that “includes the ZP’s network configuration information” and “that a new ZP, set to factory defaults, shall have well-known parameter values, allowing the CP to determine that it is unconfigured.” <i>Id.</i>, 12:59-67; <i>see also, e.g., id.</i>, 13:16-55.
establishing a short-range signal transmission path with a wireless device independently of the communication network;	Millington ’896 discloses this claim element. For example, Millington ’896 refers to its short-range signal transmission path as a “rudimentary communication path” or an “initial communication path” and describes and illustrates how this path is established between a “zone player”/ “ZP” and “controller”/“CP” independently of the WLAN. <pre> sequenceDiagram participant User as User triggers Activation UI participant CP as CP participant ZP as ZP Note over ZP: 1 ZP->>CP: 2 Alive (zpUUID) Note over CP: 352 CP->>ZP: 3 QueryNetParams (zpUUID, cpPK, tid) Note over ZP: 351 ZP->>CP: 4 RespondNetParams (zpUUID, netConfig, zpPK, tid) Note over CP: 353 CP->>ZP: 5 SetNetParams (zpUUID, netConfig, tid) Note over ZP: 354 ZP->>CP: AckNetParams (zpUUID, tid) Note over CP: 355 </pre> FIG. 3B <i>See, e.g., id.</i>, 9:52-14:23. Millington ’951 further discloses that the “rudimentary communication path” may operate over “wireless” protocols, such as IEEE 802.11, and thus, meets the “short-range” requirement¹⁰ of the claim element. <i>See, e.g., id.</i>, 9:52-10:13

¹⁰ Compare *e.g.*, ’608 Patent, cl. 1 (reciting “establishing a short-range signal transmission path with a wireless device independently of the communication network”), *with* cl. 3 (limiting claim 1 by reciting “wherein the short-range signal transmission path is not a wireless local area network that utilizes protocols based on IEEE 802.11 standards.”).

1		(“Establishing a rudimentary communication path. In
2		reference to FIG. 3A, a zone player is not yet a member of a
3		HOUSEHOLD. It is assumed that the zone player is to be
4		added to become a member of the HOUSEHOLD by a cable
5		or wireless. When the zone player is initially turned on, it
6		executes an embedded module that is configured to establish
7		a rudimentary communication path with another device
8		(network-enabled). The rudimentary communication path
9		facilitates the automatic configuration of the zone player via
10		the another device. This communication path may operate
11		over wireless and/or Ethernet protocols, as the zone player
12		may be connected to one or both . . . It should also be noted
13		that the communication path does not have to be direct
14		between two devices and may be bridged by one or more
15		other devices. Because the communication path is only used
16		for initial device configuration, it does not require significant
17		performance or sophisticated functionality. There are at least
18		two elements to establish the communication path: channel
19		selection and packet exchange. Channel Selection. The
20		selection of an appropriate (RF) transmission channel or
21		simply channel is primarily an exercise in two constraints:
22		finding a channel that is quiet from a protocol (e.g., 802.11)
23		viewpoint, i.e., minimal conflicting wireless traffic, and
24		finding a channel that is quiet from an RF viewpoint, i.e.,
25		minimal noise from other signals.”).
26	in response to receiving	Millington '896 discloses this claim element.
27	the request, receiving one	
28	or more network	
	configuration packets	For example, Millington '896 discloses that the
	from the wireless device	“controller”/“CP” sends a “SetNetParams” message in
	via the short-range signal	packet form over the short-range communication path, which
	transmission path,	includes network configuration data according to a
	wherein the one or more	predetermine data format that enables the target “zone
	network configuration	player”/ “ZP” to join the WLAN. In one example, this
	packets convey network	network configuration data includes an SSID of the WLAN
	configuration data	and a WEP key, which is a “security passphrase” for
	associated with the	accessing the WLAN.
	communication network	
	according to a	
	predetermined data	
	format, the network	
	configuration data	
	including at least a	
	security passphrase for	

accessing the
communication network;

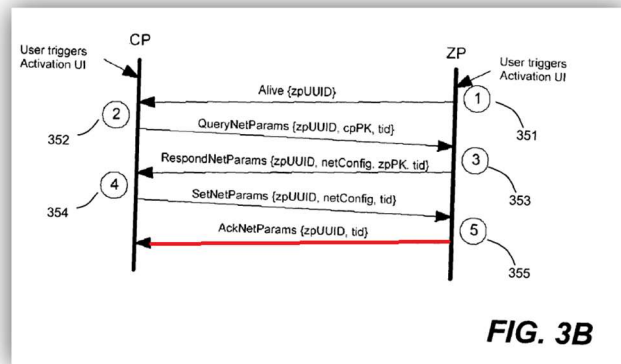


See, e.g., *id.*, 2:4-12 (“[A]n Ad-hoc (wireless or wired) network is established to facilitate communications among a group of devices. When a new device is added to the network, a rudimentary communication path is initially established between one of the devices in the network (‘first device’) and the new device (‘second device’) such that necessary parameters (e.g., SSID, WEP security, channel frequency) can be exchanged for the second device to function properly in the network.”), 10:63-65 (“Packet Exchange. To enable communication between devices that are not part of the same HOUSEHOLD, a packet exchange network infrastructure is developed.”), 10:60-11:59 (describing predetermined format of “packets” including “two flags” in the “message body”), 13:29-35 (“SetNetParams—a command message from the CP to the ZP indicating that the ZP should reconfigure its network parameters. The WEP key is encrypted using the ZP’s public key, and therefore only readable by the ZP. The command includes at least a zpUUID, netConfig and tid. It should be noted that netConfig includes the new configuration parameters for the ZP, as determined by the CP.”), 14:18-26 (“[T]he CP determines that it generates new configuration parameters in accordance with the following: HHID—this is provided by the user via the CP user interface or automatically generated by the CP. SSID—this is automatically generated by the CP (e.g., set to the same value as the HHID). WEP Key—this is automatically generated (e.g., using a pseudo-random number generator, seeded with entropy collected by the CP).”).

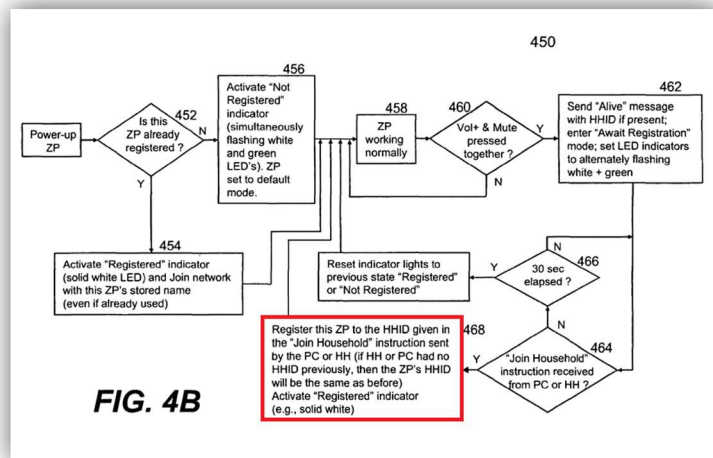
executing an application
on the target device to

Millington '896 discloses this claim element.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	decode and process the one or more network configuration packets and recover the network configuration data; and	For example, Millington '896 discloses that the “zone player”/ “ZP” executes an application to decode and process the received “SetNetParams” packet to recover the network configuration data. The “zone player”/“ZP then uses the recovered network configuration data to join and begin operating on the WLAN. <i>See, e.g., id.</i>, 6:36-37, 8:28-39 (“The zone player 200 includes a network interface 202, a processor 204, a memory 206 The memory 282 may be loaded with one or more application modules 284 that can be executed by the microcontroller 276 with or without a user input via the user interface 278 to achieve desired tasks. In one embodiment, <i>an application module is configured to facilitate automatic establishment of a wireless connection with a network or another device.</i> In another embodiment, an application module is configured to facilitate automatically configuring itself after communicating with another configured device. It should be noted that similar <i>application modules may also be included in the memory 206 of FIG. 2A...</i>”), 13:29-31 (“SetNetParams-a command message from the CP to the ZP indicating that the ZP should reconfigure its network parameters.”), 14:14-17 (“At 355, when the ZP receives a SetNetParams message, it reconfigures its own HHID and WEP key to match those contained in the network packet.”), 13:38-42 (“AckNetParams-a response to the SetNetParams messaging. The response indicates that the SetNetParams message was received and that the network configuration contained therein has been successfully applied. The response includes at least a zp UUID and a tid.”).
20 21 22 23 24 25 26	after receiving the network configuration packets, employing via the wireless radio the network configuration data conveyed in the one or more network configuration packets to enable the target device to join the communication network.	Millington '896 discloses this claim element. For example, as just explained, Millington '896 discloses that the “zone player”/“ZP” recovers the network configuration data from the “SetNetParams” packet and uses the recovered network configuration data to join and begin operating on the WLAN.



See also, e.g., *id.*, 14:32-35 (“Subsequent to the activation process, any devices that have been reconfigured will attempt to establish normal network communications using their new network configuration parameters.”), 17:35-38 (“[T]he process goes to 468 where the zone player is now part of the wireless network named after an HHID received either from a configured device or provided by itself.”).



C. Mathews '608

124. Motorola '671 is material to patentability of Mathews '608 because Motorola '671 discloses expressly or inherently each and every element of claim 1 of Mathews '608. The chart below demonstrates this.

Mathews '608 Claim 1	Motorola '671
1. A method for commissioning a target streaming media device onto a communication network,	Motorola '671 discloses such a method as set forth in the claim elements below. <i>See, e.g.,</i> Motorola '671, Abstract (“A wireless networking system and method for wireless network configuration of dual mode wireless networking devices, such as a dual mode cordless telephone base station and one or more dual mode wireless network client devices... The dual mode devices wirelessly exchange network configuration data, via their respective radio transceivers, in response to the initiation of a wireless pairing between the devices by an end user. Within each device, the received network configuration data is transferred from the radio transceiver to the wireless network transceiver. The devices then establish a wireless networking communication or networking link, via their wireless network transceivers, based on the network configuration data exchanged therebetween. Upon such link being established, the client device is associated with the base station device and authenticated within the wireless network.”).
the target streaming media device including a microprocessor, a wireless radio, and commissioning logic, the method comprising:	Motorola '671 discloses such a target device (e.g., “client device” depicted in FIG. 3). FIG. 3 The disclosed “client device” of Motorola '671 includes a microprocessor (e.g., “controller 48”), a plurality of wireless radios (e.g., “radio transceiver 52” constituting the claimed first wireless radio and “wireless network transceiver 54” constituting the claimed second wireless radio), and commissioning logic. <i>See, e.g., id.</i>, 7:9-26 (“The method shown in FIG. 4 described herein may be implemented in a general, multi-purpose or single purpose processor. Such a processor will execute

	instructions, either at the assembly, compiled or machine-level, to perform that process. Those instructions can be written by one of ordinary skill in the art following the description of the wireless networking configuration method described herein and stored or transmitted on a computer readable medium. The instructions may also be created using source code or any other known computer-aided design tool. A computer readable medium may be any medium capable of carrying those instructions and includes random access memory (RAM), dynamic RAM (DRAM), flash memory, read-only memory (ROM), compact disk ROM (CD-ROM), digital video disks (DVDs), magnetic disks or tapes, optical disks or other disks, silicon memory (e.g., removable, non-removable, volatile or non-volatile), packetized or non-packetized wireline or wireless transmission signals.”).
receiving, by the target streaming media device, a message to initiate a commissioning process with the target streaming media device;	Motorola '671 discloses this claim element. For instance, Motorola '671 discloses a wireless device (e.g., the “base station” of FIG. 3). in proximity to the target device FIG. 3 Motorola '671 also discloses an “initiating step” that “typically involves pressing a button on the base station and/or the client device 34, similar to initiating the registration process between a handset and a base station in a cordless telephony system. Alternatively, the initiating step 62 can include selecting an initiation option from an on-screen menu, or other suitable means for initiating the registration process.” <i>Id.</i>, 5:39-45. Motorola '671 further discloses an exchange of messages as part of a “pairing sequence.” <i>Id.</i>, 3:1-14 (“Typically, an end user initiates the handset registration process or pairing sequence by pressing one

	or more buttons on the handset and/or the base station. The pairing sequence typically is performed in accordance with one or more conventional standards, such as the Digital Enhanced (previously European) Cordless Telecommunications (DECT) standard, its North American variant, Worldwide Digital Cordless Telecommunications (WDCT) standard, and the Bluetooth™ wireless standard.”).
establishing a short-range signal transmission path with a wireless device independently of the communication network;	Motorola '671 discloses this claim element. For instance, Motorola '671 discloses that the “base station” establishes a short-range signal transmission path (e.g., Bluetooth path) with the “client device” via each device’s respective “radio transceiver” 42, 52. <pre> graph LR subgraph Base_Station [BASE STATION 32] NI[36 NETWORK INTERFACE] C[38 CONTROLLER] RT[42 RADIO TRANSCEIVER] WNT[44 WIRELESS NETWORK TRANSCEIVER] NI --- C C --- RT C --- WNT end subgraph Client_Device [CLIENT DEVICE 34] RT2[52 RADIO TRANSCEIVER] C2[48 CONTROLLER] WNT2[54 WIRELESS NETWORK TRANSCEIVER] RT2 --- C2 C2 --- WNT2 end WNT --- WNT2 RT <--> RT2 subgraph Wired_Network [WIRED NETWORK 31] NI end subgraph Wireless_Link [WIRELESS LINK 30] RT RT2 end </pre> FIG. 3 See also, e.g., <i>id.</i>, 3:1-14 (“Before the base station 22 will recognize the handset 24 and be able to communicate therewith, the handset 24 must be registered with the base station 22, e.g., using a pairing sequence, which creates a unique and encrypted or private wireless link between the base station 22 and the handset 24.... The pairing sequence typically is performed in accordance with one or more conventional standards, such as ... the Bluetooth™ wireless standard.”), 5:55-64 (“In the method 60, once the networking configuration process has been initiated, the method 60 performs a step 64 in which a wireless pairing, such as a pairing sequence, is established between the base station device 32 and the client device 34. That is, in general, the step 64 creates or establishes unique and encrypted wireless link between the radio transceiver 42 of the base station device 32 and the radio transceiver 52 of the client device 34. It should be understood that other suitable forms of registration between the base station device 32 and the client device 34 are possible.”).

1 after receiving the message, 2 receiving one or more network 3 configuration packets from the 4 wireless device via the short-range 5 signal transmission path, the one 6 or more network configuration 7 packets conveying network 8 configuration data associated with 9 the communication network 10 according to a predetermined data 11 format, the network configuration 12 data including at least a security 13 configuration data for accessing 14 the communication network;	Motorola '671 discloses this claim element. For instance, Motorola '671 discloses: "Once the base station device 32 and the client device 34 device have been wirelessly paired, via their respective radio transceivers, the method 60 performs a step 66 in which the respective controllers of the wirelessly-paired devices exchange network configuration data wirelessly using the respective radio transceivers as the wireless data path. As discussed hereinabove, network configuration data, in general, is information relating to one or more wireless network devices that is needed to authenticate wireless network devices and to allow wireless network communication links between the wireless networking devices via their respective wireless network transceivers." <i>Id.</i>, 6:10-21. Motorola '671 also discloses: "For example, 802.11x networking devices, network configuration data can include 802.11x configuration data, such as data relating to the name of the wireless network, which is known as its service set identifier (SSID), the channel that is to be used within the wireless network (e.g., the router channel), and one or more security keys." <i>Id.</i>, 6:26-31.
17 executing the commissioning 18 logic on the target streaming 19 media device to decode and 20 process the one or more network 21 configuration packets and recover 22 the network configuration data;	Motorola '671 discloses this claim element. For instance, Motorola '671 discloses: "Once sufficient network configuration data has been exchanged between the base station 32 and the client device 34, the method 60 performs a step 68 in which the controller or other suitable component or components in each device loads or transfers network configuration data to its respective wireless network transceiver. That is, in the base station 32, any network configuration data received or otherwise accessible by the controller 38 is loaded or transferred from the radio transceiver 42 or other device locations into the device wireless network transceiver 44. Similarly, in the client device 34, network configuration data received or otherwise accessible by the controller 48 is transferred from the radio transceiver 52 or other device locations

1		to the device wireless network transceiver 54.” <i>Id.</i> , 6:36-49.
2		
3	after receiving the network configuration packets, employing	Motorola ’671 discloses these claim elements.
4	via the wireless radio the network configuration data conveyed in the	For instance, Motorola ’671 discloses:
5	one or more network configuration packets to enable	“The method also includes a step 72 in which the base
6	the target streaming media device to join the communication	station 32 and the client device 34, via their respective
7	network; and	wireless network transceivers, initiate or establish a
8		wireless communication link or wireless networking
9	providing a visual indication that indicates the commissioning	link between the devices. The step 72 includes
10	process is complete.	establishing a wireless networking link between the
11		wireless network transceiver 44 and the wireless
12		networking transceiver 54 based on the network
13		configuration data that was received by or otherwise
14		accessed by the respective device controllers, e.g., via
15		the loading step 68. The wireless communication or
16		networking link is established to allow the client device
17		34 to become authenticated by the base station 32 and
18		therefore allowed access to the wireless network to
19		which the base station 32 belongs. Once the client
20		device 34 has been authenticated or associated with the
21		base station 32, i.e., the client device 34 has been
22		recognized as a wireless networking device and allowed
23		access to the wireless network, the method 60 can
24		include a step 74 of confirming authentication of the
25		client device 34 within the wireless network. The
26		confirming step 74 can include any suitable form of
27		confirmation, e.g., an LED, text or graphic display on
28		the client device 34 and/or the base station 32.
		Alternatively, the confirming step 74 can include one or
		more audible signals from the client device 34 and/or
		the base station 32 confirming the recognition of the
		client device 34 as a wireless networking device within
		the wireless network.” <i>Id.</i> , 6:63-7:8.

125. Sonos’s invalidity contentions and allegations of inequitable conduct from the ITC Investigation are material to patentability of Mathews ’608 because these contentions provide a roadmap highlighting the relevance of certain asserted prior art, including Millington ’951, in connection with at least claims 1 and 9 of Mathews ’615. In turn, claims 1 and 9 of Mathews ’615 are substantially similar

1 to claim 1 of Mathews '608, as set forth above in paras. 88-107. Moreover,
2 Sonos's ITC invalidity contentions are material to patentability of Mathews '608
3 because these contentions provide a roadmap highlighting the relevance of certain
4 asserted prior art, including Millington '951 as it pertains to the limitation in
5 claim 1 of Mathews '608 of "*providing a visual indication that indicates the*
6 *commissioning process is complete,*" which was the only limitation that the
7 Examiner was unable to locate in the prior art.

8 126. Sonos's IPR Petition is material to patentability of Mathews '608
9 because this IPR Petition provides a roadmap highlighting the relevance of
10 Roberts, Asokan, and Suumaki in connection with at least claims 1 and 9 of
11 Mathews '615. In turn, claims 1 and 9 of Mathews '615 are substantially similar
12 to claim 1 of Mathews '608, as set forth above in paras. 88-107. Further, Sonos's
13 IPR Petition is material to patentability of Mathews '608 because this Petition
14 provides a roadmap highlighting the relevance of Roberts, Asokan, and Suumaki,
15 as they pertain to the limitation in claim 1 of Mathews '608 of "*providing a visual*
16 *indication that indicates the commissioning process is complete,*" which was the
17 only limitation that the Examiner was unable to locate in the prior art. Still
18 further, Google's Response to Sonos's IPR Petition is material to patentability of
19 Mathews '608 because this Response conceded that Roberts, Asokan, and
20 Suumaki disclosed and/or rendered obvious at least claims 1 and 9 of
21 Mathews '615, as well as conceded that Roberts, Asokan, and Suumaki disclosed
22 and/or rendered obvious what Sonos contended they disclosed and/or rendered
23 obvious, including the limitation in claim 1 of Mathews '608 of "*providing a*
24 *visual indication that indicates the commissioning process is complete,*" which
25 was the only limitation that the Examiner was unable to locate in the prior art.
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27
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**COUNT I: DECLARATION OF NON-INFRINGEMENT OF
U.S. PATENT NO. 9,485,790**

127. Sonos repeats and alleges as if fully stated herein the allegations contained in each of the preceding paragraphs.

128. Sonos requests a determination and declaration from this Court, under the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., that Sonos does not and has not infringed any claim of the '790 Patent either literally or under the doctrine of equivalents, willfully, or in any other manner.

129. Google's Counterclaims allege that Sonos infringes at least claim 1 of the '790 Patent even though Sonos has not and does not so infringe claim 1 or any of the other claims of the '790 Patent. For example, at a minimum, neither Sonos nor the accused products perform the step of "*receiving from a wireless device in proximity to the target device a request to initiate a commissioning process with the target device*" or the step of "*executing an application on the target device to decode and process by the commissioning logic the one or more WLAN configuration packets and recover the WLAN configuration data.*"

130. An actual, continuing and justiciable controversy exists between Sonos and Google and as to Sonos's non-infringement of the '790 Patent. Absent a declaration of non-infringement, Google will continue to wrongfully assert the '790 patent against Sonos and will continue to cause Sonos injury and damage.

**COUNT II: DECLARATION OF INVALIDITY OF
U.S. PATENT NO. 9,485,790**

131. Sonos repeats and alleges as if fully stated herein the allegations contained in each of the preceding paragraphs.

132. Sonos requests a determination and declaration from this Court, under the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., that

1 the '790 Patent is invalid for failure to meet one or more requirements of Title 35
2 of the United States Code, including at least 35 U.S.C. §§ 101, 102, 103, and 112.

3 133. By way of example, claim 1 of the '790 Patent recites "*receiving*
4 *from a wireless device in proximity to the target device a request to initiate a*
5 *commissioning process with the target device.*" This limitation finds no written
6 description support in compliance with 35 U.S.C. § 112.

7 134. As another example, each claim of the '790 Patent is anticipated
8 and/or rendered obvious under 35 U.S.C. §§ 102 and/or 103 by each of (a)
9 Sonos's U.S. Patent 8,326,951, (b) various versions of Sonos's commercial
10 products that have been publicly available before April 11, 2012 and March 15,
11 2013, including Sonos's original commercial products released in January 2005,
12 and (c) U.S. Patent 8,798,671.

13 135. An actual, continuing and justiciable controversy exists between
14 Sonos and Google and as to the validity of the '790 Patent. Absent a declaration
15 of invalidity, Google will continue to wrongfully assert the '790 patent against
16 Sonos and will continue to cause Sonos injury and damage.

17 **COUNT III: DECLARATION OF UNENFORCEABILITY OF**
18 **U.S. PATENT NO. 9,485,790**

19 136. Sonos repeats and alleges as if fully stated herein the allegations
20 contained in each of the preceding paragraphs.

21 **A. Failure to Disclose Motorola '671 Patent**

22 137. Mr. Sorell committed inequitable conduct before the USPTO because
23 he knowingly failed to disclose Motorola '671 to the USPTO in connection with
24 the prosecution of Mathews '790 with an intent to deceive the USPTO in issuing
25 Mathews '790.

26 138. Mr. Sorrell was substantively involved in prosecution of
27 Mathews '790 as set forth in paras. 39-44.
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1 139. Mr. Sorrell knew about Motorola '671 and understood its material
2 relevance to Mathews '790 as set forth in paras. 45-63.

3 140. Mr. Sorell failed to disclose Motorola '671 to the UPSTO in
4 connection with the prosecution of Mathews '790.

5 141. Motorola '671 was material to patentability of Mathews '790 as set
6 forth in para. 121.

7 142. By knowingly failing to disclose Motorola '671 to the USPTO, Mr.
8 Sorell intended to deceive the USPTO into issuing Mathews '790 because he
9 knew that the USPTO would not have issued Mathews '790 had Motorola '671
10 been disclosed.

11 143. No art cited to or by the USPTO during prosecution of Mathews '790
12 was cumulative of Motorola '671.

13 144. The USPTO would not have issued Mathews '790 had it been made
14 aware of Motorola '671.

15 **B. Failure to Disclose Millington '951**

16 145. Mr. Sorell committed inequitable conduct before the USPTO
17 because he knowingly failed to disclose Millington '951 to the USPTO in
18 connection with the prosecution of Mathews '790 with an intent to deceive the
19 USPTO in issuing Mathews '790.

20 146. Mr. Sorrell was substantively involved in prosecution of
21 Mathews '790 as set forth in paras. 39-44.

22 147. Mr. Sorrell knew about Millington '951 and understood its material
23 relevance to Mathews '790 as set forth in paras. 45-63.

24 148. Mr. Sorell failed to disclose Millington '951 to the USPTO in
25 connection with the prosecution of Mathews '790.

26 149. Millington '951 was material to patentability of Mathews '790 as set
27 forth in para. 122.
28

1 150. By knowingly failing to disclose Millington '951 to the USPTO, Mr.
2 Sorell intended to deceive the USPTO into issuing Mathews '790 because he
3 knew that the USPTO would not have issued Mathews '790 had Millington '951
4 been disclosed.

5 151. No art cited to or by the USPTO during prosecution of Mathews '790
6 was cumulative of Millington '951.

7 152. The USPTO would not have issued Mathews '790 had it been made
8 aware of Millington '951.

9 **COUNT IV: DECLARATION OF NON-INFRINGEMENT OF**
10 **U.S. PATENT NO. 12,132,608**

11 153. Sonos repeats and alleges as if fully stated herein the allegations
12 contained in each of the preceding paragraphs.

13 154. Sonos requests a determination and declaration from this Court,
14 under the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., that Sonos
15 does not and has not infringed any claim of the '608 Patent either literally or
16 under the doctrine of equivalents, willfully, or in any other manner.

17 155. Google's Counterclaims allege that Sonos infringes at least claim 1
18 of the '608 Patent even though Sonos has not and does not so infringe claim 1 or
19 any of the other claims of the '608 Patent. For example, at a minimum, neither
20 Sonos nor the accused products perform the step of "*receiving, by the target*
21 *streaming media device, a message to initiate a commissioning process with the*
22 *target streaming media device.*"

23 156. An actual, continuing and justiciable controversy exists between
24 Sonos and Google and as to Sonos's non-infringement of the '608 Patent. Absent
25 a declaration of non-infringement, Google will continue to wrongfully assert
26 the '608 patent against Sonos and will continue to cause Sonos injury and
27 damage.
28

**COUNT V: DECLARATION OF INVALIDITY OF
U.S. PATENT NO. 12,132,608**

157. Sonos repeats and alleges as if fully stated herein the allegations contained in each of the preceding paragraphs.

158. Sonos requests a determination and declaration from this Court, under the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq., that the '608 Patent is invalid for failure to meet one or more requirements of Title 35 of the United States Code, including at least 35 U.S.C. §§ 101, 102, 103, and 112.

159. By way of example, claim 1 of the '608 Patent recites "*receiving . . . a message to initiate a commissioning process with the target streaming media device.*" This limitation finds no written description support in compliance with 35 U.S.C. § 112.

160. As another example, each claim of the '608 Patent is anticipated and/or rendered obvious under 35 U.S.C. §§ 102 and/or 103 by each of (a) Sonos's U.S. Patent 8,326,951, (b) various versions of Sonos's commercial products that have been publicly available before April 11, 2012 and March 15, 2013, including Sonos's original commercial products released in January 2005, and (c) U.S. Patent 8,798,671.

161. An actual, continuing and justiciable controversy exists between Sonos and Google and as to the validity of the '608 Patent. Absent a declaration of invalidity, Google will continue to wrongfully assert the '608 patent against Sonos and will continue to cause Sonos injury and damage.

**COUNT VI: DECLARATION OF UNENFORCEABILITY OF
U.S. PATENT NO. 12,132,608**

162. Sonos repeats and alleges as if fully stated herein the allegations contained in each of the preceding paragraphs.

A. Infectious Unenforceability Stemming From Mathews '615

163. Mr. Riel committed inequitable conduct before the USPTO because he knowingly failed to disclose Millington '896 to the USPTO in connection with the prosecution of Mathews '615 with an intent to deceive the USPTO in issuing Mathews '615.

164. Mr. Riel was substantively involved in prosecution of Mathews '615 as set forth in paras. 65-75.

165. Mr. Riel knew about Millington '896 and understood its material relevance to Mathews '615 as set forth in paras. 76-98.

166. Mr. Riel failed to disclose Millington '896 to the USPTO in connection with the prosecution of Mathews '615.

167. Millington '896 was material to patentability of Mathews '615 as set forth in para. 123.

168. By knowingly failing to disclose Millington '896 to the USPTO, Mr. Riel intended to deceive the USPTO into issuing Mathews '615 because he knew that the USPTO would not have issued Mathews '615 had Millington '896 been disclosed.

169. No art cited to or by the USPTO during prosecution of Mathews '615 was cumulative of Millington '896.

170. The USPTO would not have issued Mathews '615 had it been made aware of Millington '896.

171. Mathews '615 is unenforceable due to the foregoing inequitable conduct committed by Mr. Riel. Likewise, because Mathews '608 is a direct continuation of Mathews '615 and at least claim 1 of Mathews '615 is substantially similar to claim 1 of Mathews '608, Mathews '608 is unenforceable due to the doctrine of infectious unenforceability.

B. Failure to Disclose Motorola '671

172. Mr. Sorell committed inequitable conduct before the USPTO because he knowingly failed to disclose Motorola '671 to the USPTO in connection with the prosecution of Mathews '608 with an intent to deceive the USPTO in issuing Mathews '608.

173. Mr. Sorrell was substantively involved in prosecution of Mathews '608 as set forth in paras. 88-93.

174. Mr. Sorrell knew about Motorola '671 and understood its material relevance to Mathews '608 as set forth in paras. 45-63, 88-107.

175. Mr. Sorell failed to disclose Motorola '671 to the USPTO in connection with the prosecution of Mathews '608.

176. Motorola '671 was material to patentability of Mathews '608 as set forth in para. 124.

177. By knowingly failing to disclose Motorola '671 to the USPTO, Mr. Sorell intended to deceive the USPTO into issuing Mathews '608 because he knew that the USPTO would not have issued Mathews '608 had the Motorola '671 Patent been disclosed.

178. No art cited to or by the USPTO during prosecution of Mathews '608 was cumulative of Motorola '671.

179. The USPTO would not have issued Mathews '608 had it been made aware of Motorola '671.

C. Failure to Disclose Sonos's Invalidity Contentions and Allegations of Inequitable Conduct

180. Mr. Sorell and/or Mr. Riel committed inequitable conduct before the USPTO because one or both of these individuals knowingly failed to disclose Sonos's invalidity contentions and its allegations of inequitable conduct concerning Mathews '615 to the USPTO and/or make the USPTO aware that there was pending litigation that was directly relevant to Mathews '608 in

1 connection with the prosecution of Mathews '608 with an intent to deceive the
2 USPTO in issuing Mathews '608.

3 181. Mr. Sorell and/or Mr. Riel were substantively involved in
4 prosecution of Mathews '608 as set forth in paras. 88-93.

5 182. Mr. Sorell and/or Mr. Riel knew about Sonos's invalidity contentions
6 and Sonos's allegations of inequitable conduct concerning Mathews '615 and
7 understood their material relevance to Mathews '608 as set forth in paras. 96-110.

8 183. Mr. Sorell and/or Mr. Riel failed to disclose Sonos's invalidity
9 contentions and Sonos's allegations of inequitable conduct concerning
10 Mathews '615 to the USPTO in connection with the prosecution of
11 Mathews '608.

12 184. Sonos's invalidity contentions and Sonos's allegations of inequitable
13 conduct concerning Mathews '615 were material to patentability of Mathews '608
14 as set forth in paras. 96-110, 125.

15 185. By knowingly failing to disclose Sonos's invalidity contentions and
16 Sonos's allegations of inequitable conduct concerning Mathews '615 to the
17 USPTO, Mr. Sorell and/or Mr. Riel intended to deceive the USPTO into issuing
18 Mathews '608 because one or both of these individuals knew that the USPTO
19 would not have issued Mathews '608 had Sonos's invalidity contentions or
20 Sonos's allegations of inequitable conduct concerning Mathews '615 been
21 disclosed.

22 186. No art cited to or by the USPTO during prosecution of Mathews '608
23 was cumulative of Sonos's invalidity contentions and its allegations of inequitable
24 conduct concerning Mathews '615.

25 187. The USPTO would not have issued Mathews '608 had it been made
26 aware of Sonos's invalidity contentions and Sonos's allegations of inequitable
27 conduct concerning Mathews '615.
28

D. Failure to Disclose Sonos's IPR Petition and Google's Response

188. Mr. Sorell committed inequitable conduct before the USPTO because he knowingly failed to disclose Sonos's IPR Petition and/or Google's Response to the USPTO and/or make the USPTO aware that there were pending proceedings that were directly relevant to Mathews '608 in connection with the prosecution of Mathews '608 with an intent to deceive the USPTO in issuing Mathews '608.

189. Mr. Sorell was substantively involved in prosecution of Mathews '608 as set forth in paras 88-93.

190. Mr. Sorell knew about Sonos's IPR Petition and/or Google's Response and understood their material relevance to Mathews '608 as set forth in paras. 111-120.

191. Mr. Sorell failed to disclose Sonos's IPR Petition and/or Google's Response to the USPTO in connection with the prosecution of Mathews '608.

192. Sonos's IPR Petition and/or Google's Response were material to patentability of Mathews '608 as set forth in paras. 111-120, 126.

193. By knowingly failing to disclose Sonos's IPR Petition and/or Google's Response to the USPTO, Mr. Sorell intended to deceive the USPTO into issuing Mathews '608 because he knew that the USPTO would not have issued Mathews '608 had Sonos's IPR Petition and/or Google's Response been disclosed.

194. No art cited to or by the USPTO during prosecution of Mathews '608 was cumulative of Sonos's IPR Petition and/or Google's Response.

195. The USPTO would not have issued Mathews '608 had it been made aware of Sonos's IPR Petition and/or Google's Response.

PRAYER FOR RELIEF

WHEREFORE, Sonos respectfully requests:

- A. An order dismissing, with prejudice, Google's Counterclaims against Sonos;
- B. An order denying all relief that Google seeks in its Counterclaims and any amendments thereto;
- C. Entering judgment in favor of Sonos and against Google on Sonos's Counterclaims;
- D. Entering a declaratory judgement that Sonos does not and has not infringed any valid and enforceable claim of Google's Asserted Patents;
- E. Entering a declaratory judgment that Mathews '615 is unenforceable due to inequitable conduct;
- F. Entering a declaratory judgment that Google's Asserted Patents are unenforceable due to inequitable conduct;
- G. Entering a declaratory judgment that the claims of Google's Asserted Patents are invalid;
- H. Finding this case to be exceptional under 35 U.S.C. § 285 and awarding Sonos its costs and attorney fees;
- I. Awarding Sonos monetary relief, including damages sustained by Sonos in an amount to be determined at trial; and
- J. Such other and further relief as the Court deems just and proper.

1 Dated: August 15, 2025 Respectfully submitted,

2 ORRICK HERRINGTON & SUTCLIFFE LLP
3 *and*
4 LEE SULLIVAN SHEA & SMITH LLP

5 By: /s/ Alyssa Caridis

6 ALYSSA CARIDIS

7 *Attorneys for Plaintiff Sonos, Inc.*
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