

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

D&M HOLDINGS INC. d/b/a THE
D+M GROUP, D&M HOLDINGS U.S.
INC.,

Plaintiffs,

v.

SONOS, INC.,

Defendant.

Civil Action No. 16-141-RGA

MEMORANDUM OPINION

Jack B. Blumenfeld, Michael J. Flynn, MORRIS, NICHOLS, ARSHT & TUNNELL LLP, Wilmington, DE; John M. Jackson, Matthew C. Acosta, Blake T. Dietrich, Christopher J. Rourk, Robert P. Latham, JACKSON WALKER L.L.P., Dallas, TX, David Folsom, JACKSON WALKER L.L.P., Texarkana, TX; Wasif Qureshi, JACKSON WALKER L.L.P., Houston, TX.

Attorneys for Plaintiffs.

Philip A. Rovner, Jonathan A. Choa, POTTER ANDERSON & CORROON LLP, Wilmington, DE; George I. Lee, Sean M. Sullivan, Rory P. Shea, J. Dan Smith, Michael P. Boyea, Cole B. Richter, Jae Y. Park, LEE SULLIVAN SHEA & SMITH LLP, Chicago, IL.

Attorneys for Defendant.

February 22, 2018


ANDREWS, U.S. DISTRICT JUDGE:

Presently before the Court are Defendant's Motion for Summary Judgment of Non-Infringement and Invalidity of U.S. Patent 7,734,850 (D.I. 177) and related briefing (D.I. 178, 227, 240); Defendant's Motion for Summary Judgment of Invalidity of U.S. Patent No. 7,995,899 (D.I. 186) and related briefing (D.I. 190, 222, 243); Defendant's Motion for Summary Judgment of Noninfringement of U.S. Patent No. 7,995,899 (D.I. 193) and related briefing (D.I. 194, 224, 248); and Defendant's Motion for Summary Judgment of Noninfringement of U.S. Patent No. 7,987,294 and No Earlier Invention Date of U.S. Patent No. 7,987,294 (D.I. 191) and related briefing (D.I. 192, 223, 244). The Court held oral argument on all motions for summary judgment (D.I. 177, 186, 191, 193) on January 30, 2018. (D.I. 278) ("Tr."). The Court ordered, and the parties subsequently submitted, additional claim construction briefing. (Tr. 118:7-14; D.I. 280, 285, 291, 294). This Memorandum Opinion resolves the claim construction issues briefed by the parties, which underlie Defendant's summary judgment motions. The motions themselves remain pending.

I. BACKGROUND

Plaintiffs filed a patent infringement action on March 7, 2016 against Defendant, alleging infringement of several patents, including U.S. Patent Nos. 7,734,850 ("the '850 patent"), 7,995,899 ("the '899 patent"), and 7,987,294 ("the '294 patent"). (D.I. 1). Plaintiffs filed an amended complaint on May 1, 2017. (D.I. 65).

II. LEGAL STANDARD

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal quotation marks omitted). "[T]here is no magic formula or

catechism for conducting claim construction.’ Instead, the court is free to attach the appropriate weight to appropriate sources ‘in light of the statutes and policies that inform patent law.’”

SoftView LLC v. Apple Inc., 2013 WL 4758195, at *1 (D. Del. Sept. 4, 2013) (quoting *Phillips*, 415 F.3d at 1324) (alteration in original). When construing patent claims, a court considers the literal language of the claim, the patent specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977–80 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). Of these sources, “the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.” *Phillips*, 415 F.3d at 1315 (internal quotation marks omitted).

“[T]he words of a claim are generally given their ordinary and customary meaning. . . . [Which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” *Id.* at 1312–13 (citations and internal quotation marks omitted). “[T]he ordinary meaning of a claim term is its meaning to [an] ordinary artisan after reading the entire patent.” *Id.* at 1321 (internal quotation marks omitted). “In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314.

When a court relies solely upon the intrinsic evidence—the patent claims, the specification, and the prosecution history—the court’s construction is a determination of law. *See Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 841 (2015). The court may also make factual findings based upon consideration of extrinsic evidence, which “consists of all evidence external to the patent and prosecution history, including expert and inventor testimony,

dictionaries, and learned treatises.” *Phillips*, 415 F.3d at 1317–19. Extrinsic evidence may assist the court in understanding the underlying technology, the meaning of terms to one skilled in the art, and how the invention works. *Id.* Extrinsic evidence, however, is less reliable and less useful in claim construction than the patent and its prosecution history. *Id.*

“A claim construction is persuasive, not because it follows a certain rule, but because it defines terms in the context of the whole patent.” *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that “a claim interpretation that would exclude the inventor’s device is rarely the correct interpretation.” *Osram GMBH v. Int’l Trade Comm’n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (citation omitted).

III. TERMS FOR CONSTRUCTION

Plaintiffs allege infringement of claims 3, 7, 12, and 14 of the ‘850 patent. (D.I. 178 at 1; D.I. 227 at 1). Claim 3 depends from claim 1, claim 7 depends from claim 5, and claims 12 and 14 depend from claim 10. Independent claims 1, 5, and 10 read as follows:

1. A method of resuming an interrupted data stream transfer comprising:
 - obtaining recovery state information, including a stored compression block boundary position and a stored file boundary position of the interrupted data stream transfer;
 - resuming the data stream transfer by requesting a *compressed data stream* starting with the stored compression block boundary position;
 - advancing through the resumed data stream transfer to reach the stored file boundary position by decompressing data from the stored compression block boundary position to the stored file boundary position;
 - once the file boundary position has been reached, decompressing and *de-archiving* data after the file boundary position; and
 - storing the de-archived data in a destination filesystem.
5. A method of resuming a data stream transfer comprising:
 - obtaining recovery state information by:

receiving an initial compressed data stream, wherein the initial *compressed data stream* includes one or more compression block boundaries and one or more file boundaries;

detecting a file boundary; and

in response to detecting the file boundary, storing the position of the detected file boundary and the position of the last compression block boundary before the detected file boundary;

requesting a *compressed data stream* starting with the stored compression block boundary position;

advancing through the resumed data stream transfer to reach the stored file boundary position by decompressing data from the stored compression block boundary position to the file boundary position; and

once the file boundary position has been reached, decompressing and *de-archiving* data after the stored file boundary position.

10. A method of resuming a data stream transfer comprising:

obtaining recovery state information by:

receiving an initial *compressed data stream*;

detecting a compression block boundary in the initial *compressed data stream*;

detecting an archive block boundary in the initial *compressed data stream*;

detecting a file boundary in the initial *compressed data stream*; and

in response to the detection of the compression block boundary, the archive block boundary, and the file boundary, saving the recovery state information;

wherein the recovery state includes the compression block boundary position and the file boundary position;

requesting a *compressed data stream* starting with the saved compression block boundary position;

advancing through the resumed data stream transfer to reach the saved file boundary position by decompressing data from the saved compression block boundary position to the saved file boundary position; and

once the file boundary position has been reached, decompressing and *de-archiving* data after the saved file boundary position

(‘850 patent, claim 1) (disputed terms italicized).

Plaintiffs allege infringement of claims 3, 4, 7, 9-12, 16, 20 and 26 of the ‘294 patent.

(D.I. 192 at 1). Claims 3, 4, 7, and 9-12 depend from claim 1, claim 16 depends from claim 13,

claim 20 depends from claim 18 or claim 19, and claim 26 depends from claim 25. Independent claims 1, 13, 18, 19, 25, and 26 read as follows:

1. A method for providing a multimedia system including a plurality of networked multimedia devices, the method including the steps of:

discovering the plurality of devices on a computer network;

defining at least two groups, each group being representative of a networked multimedia system including two or more devices;

providing, for each *group*, a *system control interface* for receiving, from a control device, a system control signal indicative of an operational change to the *group*, wherein each *group* has a relative group leader configured to:

- (i) receive the system control signal; and

- (ii) in response to the system control signal, define respective corresponding device control signals, and *provide those device control signals to the devices* thereby to implement the operational change across the *group*;

defining at least one zone, the zone being representative of a networked multimedia system including two or more groups;

providing, for the *zone*, a *system control interface* for receiving, from a control device, a zone control signal indicative of an operational change to the *zone*, wherein the *zone* has a relative zone leader configured to:

- (i) receive the zone control signal; and

- (ii) in response to the zone control signal, define respective corresponding device control signals, and *provide those device control signals to the devices* thereby to implement the operational change across the *zone*.

13. A method performed by a networked multimedia device for providing a multimedia system including the device and one or more complementary networked multimedia devices, the method including the steps of:

connecting to a computer network;

undergoing a discovery process on the computer network for allowing mutual discovery of the device, and the one or more complementary devices;

determining whether the device is a group leader relative to the one or more complementary devices; and

in the case that the device is the group leader:

defining a group representative of the networked multimedia system including the device and the one or more complementary devices;

providing, for the *group*, a *system control interface* for receiving, from a control device, a system control signal indicative of an operational change to the *group*;

receiving the system control signal; and

being responsive to the system control signal for defining respective corresponding device control signals and *providing those device control signals to the devices* thereby to implement the operational change across the *group*;

determining whether the device is a zone leader relative to the one or more complementary devices and one or more further groups of complementary devices; and

in the case that the device is the zone leader:

defining a *zone* representative of a plurality of networked multimedia systems, wherein one of the networked multimedia systems includes the device and the one or more complementary devices, and wherein another of the networked multimedia systems includes a further set of complementary devices;

providing, for the *zone*, a *zone control interface* for receiving, from a control device, a system control signal indicative of an operational change to the *zone*;

receiving the zone control signal; and

being responsive to the zone control signal for defining respective corresponding device control signals for the individual devices in the *zone*, and *providing those device control signals to the devices* thereby to implement the operational change across the *zone*.

18. A non-transitory computer-readable medium encoded with computer-executable instructions that when executed by one or more processors maintained by a networked multimedia device cause the multimedia device to carry out a method of providing a multimedia system including the device, and one or more complementary wireless multimedia devices the method comprising the steps of:

connecting to a computer network;

undergoing a discovery process on the computer network for allowing mutual discovery of the device, and the one or more complementary devices;

determining whether the device is a group leader relative to the one or more complementary devices; and

in the case the device is a group leader:

defining a group representative of a networked multimedia system including the device and the one or more complementary devices;

providing, for the *group*, system control interface for receiving, from a control device, a system control signal indicative of an operational change to the *group*;

receiving the system control signal; and

being responsive to the system control signal for defining respective corresponding device control signals and *providing those signals to the devices* to implement the operational change across the *group*;

determining whether the device is a zone leader relative to the one or more complementary devices and one or more further groups of complementary devices; and

in the case that the device is the zone leader:

defining a zone representative of a plurality of networked multimedia systems, wherein one of the networked multimedia systems includes the device and the one or more complementary devices, and wherein another of the networked multimedia systems includes a further set of complementary devices;

providing, for the *zone*, a *zone control interface* for receiving, from a control device, a system control signal indicative of an operational change to the *zone*;

receiving the zone control signal; and

being responsive to the zone control signal for defining respective corresponding device control signals for the individual devices in the *zone*, and *providing those device control signals to the devices* thereby to implement the operational change across the *zone*.

19. A non-transitory computer-readable medium encoded with a set of instructions that when executed by one or more processors cause the one or more processors to carry out a method for providing a multimedia system including two or more networked multimedia devices, the method including the steps of:

discovering the devices on a computer network;

defining a group, the *group* being representative of a networked multimedia system including the devices;

providing, as a relative group leader for the *group*, a *system control interface* for receiving, from a control device, a system control signal indicative of an operational change to the *group*;

receiving the system control signal;

being responsive to the system control signal for *providing respective corresponding device control signals to the devices* to implement the operational change across the *group*;

defining a zone, the *zone* being representative of two or more networked multimedia systems, one of the networked multimedia systems being that in respect of which the *group* is representative;

providing, as a relative zone leader for the *zone*, *a zone control interface* for receiving, from a control device, a zone control signal indicative of an operational change to the *zone*;

receiving the zone control signal; and

being responsive to the zone control signal for *providing respective corresponding device control signals to the devices* to implement the operational change across the *zone*.

25. A set of networked multimedia systems, each networked multimedia system including:

a plurality of networked multimedia playback devices including a relative group leader, the group leader providing *a system control interface* for receiving, from a control device, a system control signal indicative of an operational change to the multimedia system, wherein the group leader is responsive to the system control signal for *providing respective corresponding device control signals to each of the multimedia playback devices* to implement the operational change across the multimedia system;

wherein the set of networked multimedia systems include a relative zone leader, the zone leader providing *a system control interface* for receiving, from a control device, a zone control signal indicative of an operational change to the plurality of multimedia systems, wherein the zone leader is responsive to the zone control signal for *providing respective corresponding device control signals to each of the multimedia playback devices* to implement the operational change across the plurality of multimedia systems.

26. A plurality of networked multimedia systems as recited in claim 25, wherein the set of networked multimedia systems include a relative zone leader, the zone leader providing *a system control interface* for receiving, from a control device, a system control signal indicative of an operational change to the plurality of multimedia systems, wherein the zone leader is responsive to the system control signal for providing respective corresponding device control signals to each of the multimedia playback devices to implement the operational change across the plurality of multimedia systems.

(‘294 patent, claims 1, 13, 18, 19, 25, 26) (disputed terms italicized).

Plaintiffs allege infringement of claims 1, 5, 7, 8, 10, 25 and 26 of the ‘899 patent. (D.I. 190 at 2; D.I. 222 at 1). Claim 5, 7, 8, and 10 depend from claim 1. Independent claim 1 reads as follows:

1. A method of playing back a recorded signal, comprising:

obtaining a *recording identifier corresponding to the recorded signal*;

comparing the recording identifier with previously stored identifiers in a playback preference database; and

reproducing the recorded signal using *previously stored preferences* if the recording identifier is found in the playback preference database and using default preferences if the recording identifier is not found in the playback preference database.

(‘899 patent, claim 1) (disputed terms italicized). Claim 26 depends from independent claim 19 and dependent claims 20-22 and 24.

1. “compressed data stream” (‘850 patent, claims 1, 5, 10)

- a. *Plaintiffs’ proposed construction*: “compressed data having at least one compression block boundary, at least one archive block boundary, and at least one file boundary”
- b. *Defendant’s proposed construction*: “a compressed archive file having at least one compression block boundary, at least one archive block boundary, and at least one file boundary, wherein the compressed archive file is a single file containing a plurality of individual data files.”
- c. *Court’s construction*: “compressed data having at least one compression block boundary, at least one archive block boundary, and at least one file boundary”

The Court previously construed “compressed data stream” as “compressed data having at least one compression block boundary, at least one archive block boundary, and at least one file boundary.”¹ (D.I. 141 at 1).

The parties agree that a “compressed data stream” requires “at least one archive block boundary.” Defendant argues that to have an “archive block boundary,” there must be an “archive block.” (D.I. 280 at 1). Then, argues Defendant, the patent teaches that an “archive block” cannot exist without an “archive file.” (*Id.* at 1-2). The ‘850 patent specification states

¹ The Court adopted the parties’ agreed-upon construction.

that “[l]ike compressed files, archive files also store data in blocks,” and provides an example of a prior art archive file divided into archive blocks. (‘850 patent at 1:33-51).

Plaintiffs, however, “disagree with the notion that you have to have an archive file, because you have an archive block boundary.” (Tr. 28:10-11; D.I. 230-1, Exh. 10 at ¶¶ 118-19, 189-92).

The claim language does not require an “archive file,” and Defendant’s citation to the specification shows only that “archive files” store data in “archive blocks”—not that an “archive block” requires an “archive file.” Thus, Defendant has not pointed to anything that requires me to construe “compressed data stream” to require an “archive file.” *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012) (“Absent disclaimer or lexicography, the plain meaning of the claim controls.”). On the other hand, the patent does not preclude the possibility that an “archive block” might require an “archive file.” Plaintiffs argue that “[c]ompression blocks, archive blocks, and even file boundaries are simply not required for compressed data to be processed in accordance with [Figure] 2 of the ‘850 Patent,” and that requiring an “archive file” would exclude embodiments taught by Figures 2 and 3. (D.I. 285 at 3-5). However, Defendant responds that Plaintiffs’ argument is “nonsensical” because “if there was no detecting and storing of such [compression and archive] blocks and [file] boundaries, then a recovery state would never be saved, and the claims would be completely inoperable.” (D.I. 291 at 2).

Accordingly, whether an archive block boundary requires an archive file is a question of fact about the technology, rather than a question of claim construction. I give “compressed data stream” its existing construction.

Because there is factual dispute as to whether an “archive block boundary” requires an “archive file,” I need not reach Defendant’s arguments about the definition of “archive file.” (D.I. 280 at 2).

2. “de-archiving” (’850 patent, claims 1, 5, 10)

- a. *Plaintiffs’ proposed construction*: plain and ordinary meaning
- b. *Defendant’s proposed construction*: “to extract a plurality of individual data files from an archive file”
- c. *Court’s construction*: plain and ordinary meaning

The same factual disputes that underlie whether a “compressed data stream” requires an “archive file” underlie this term, as well.

For instance, Defendant argues that “[b]ecause an ‘archive file’ is a ‘single file containing a plurality of individual data files,’ a person of ordinary skill in the art would understand that ‘de-archiving’ means” what Defendant proposes it means. (D.I. 280 at 5). Defendant also argues that the term “de-archiving” “reinforces” that the claims require an “archive file,” because to have “de-archiving,” there must be an “archive file” to “de-archive.” (*Id.*).

Accordingly, I give “de-archiving” a plain and ordinary meaning construction.

3. “defining at least two groups,” “defining a group,” “defining at least one zone,” “defining a zone,” “a [system/zone] control interface” (’294 patent, claims 1, 13, 18, 19, 25)

- a. *Plaintiffs’ proposed construction*: plain and ordinary meaning
- b. *Defendant’s proposed construction*:

“defining at least two groups,” “defining a group”: “defining [a group / at least two groups] in a manner that is not based on any manual selection of the devices represented by the [group / at least two groups] via a control device”

“defining at least one zone,” “defining a zone”: “defining [at least one zone / a zone] in a manner that is not based on any manual selection of the devices represented by the [at least one zone / zone] via a control device”

“a [system/zone] interface”: “a control interface that is formed in a manner that is not based on any manual selection of the devices represented by the [group / at least two groups / at least one zone / zone / multimedia system / plurality of multimedia systems] via a control device”

c. *Court’s construction*: plain and ordinary meaning

In a Patent Owner Preliminary Response during a recent IPR, Plaintiffs made statements about the ‘294 patent that Defendant argues constitute a “clear and unmistakable disclaimer” of forming the claimed “group,” “zone,” and corresponding “control interfaces” in a “manner that [involves] *any* manual selection of the devices represented by the ‘group’ or ‘zone’ via a control device.” (D.I. 280 at 9) (emphasis added).

First, Defendant notes that Plaintiffs argued that the

‘294 patent is concerned with dynamically forming – without the need for substantive post-purchase user configuration – a control interface for a group of multimedia devices (or zone of such groups) by which that control interface can be used to implement operational changes across the group or zone. On the other hand . . . [the prior art ‘014 patent] is concerned with manually creating and modifying a group of zone players

(D.I. 280 at 7; D.I. 197-1, Exh. B at 1). Furthermore, Plaintiffs distinguished the prior art’s “manual selection of a zone group” from the ‘294 patent’s “zone of groups [which] has its own dynamically-formed control interface.” (D.I. 197-1, Exh. B at 52).

Defendant notes that Plaintiffs’ Response characterizes the prior art approach as having “the limitation of consumers being themselves required to configure wireless speakers.” (*Id.* at 10). Plaintiffs’ Response states that the ‘294 patent “provides a solution” to the shortcomings of this prior art approach “by which non-pre-configured wireless speakers can autonomously self-configure to form and operate in a wireless audio system.” (*Id.*).

None of these statements constitutes a clear and unmistakable disclaimer by Plaintiffs of forming the claimed “group,” “zone,” and corresponding “control interfaces” in a “manner that

[involves] any manual selection of the devices represented by the ‘group’ or ‘zone’ via a control device.” See *Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1360-61 (Fed. Cir. 2017) (holding that “statements made by patent owners during an IPR can be considered for prosecution disclaimer”); see also *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003) (“for prosecution disclaimer to attach . . . the alleged disavowing actions or statements made during prosecution must be both clear and unmistakable.”).

Plaintiffs specifically noted that their “dynamic” approach does not require “*substantive* post-purchase user configuration,” leaving open the possibility that their “dynamic” approach could involve *some* post-purchase user configuration. (D.I. 197-1, Exh. B at 1). Thus, even though Plaintiffs contrasted their approach to the prior art’s “manual” approach, their statements did not disclaim manual configuration entirely.

Plaintiffs’ statement that the ‘294 patent provides a solution “by which non-pre-configured wireless speakers can autonomously self-configure” also does not amount to a disclaimer. The verb “autonomously” is too brief and too general to amount to a clear and unambiguous disclaimer that alone undoes Plaintiffs’ other statements establishing that their “dynamic” approach could involve some “manual” configuration.

Accordingly, I adopt a plain and ordinary meaning construction for these terms.

4. “group,” “zone” (‘294 patent, claims 1, 13, 18, 19)

- a. *Plaintiffs’ proposed construction*: plain and ordinary meaning
- b. *Defendant’s proposed construction*: “a virtual device that represents a set of physical devices on a network and appears on the network as an additional physical device that is separate from the physical devices in the set despite the fact that the virtual device is not a separate physical device”
- c. *Court’s construction*: “a virtual device that represents a set of physical devices on a network and appears on the network as an additional physical device that is separate from

the physical devices in the set despite the fact that the virtual device is not a separate physical device”

Defendant argues that the ‘294 patent provides lexicography for “group” and “zone,” which supports its proposed construction. (D.I. 280 at 10-12). Plaintiffs disagree. (D.I. 285 at 15-18).

A patentee is free to be its own lexicographer. *Phillips*, 415 F.3d at 1316. Here, the ‘294 patent defines “group” and “zone,” stating “[b]oth the terms ‘group’ and ‘zone’ as used in this disclosure are virtual devices.” (D.I. 280 at 10). Defendant urges that embodiments and figures elsewhere in the patent confirm that this is lexicography. (*Id.*). For example, the specification provides that “[i]n the present embodiment, a virtual device (a group or a zone) does not have a conventional hardware manifestation” (‘294 patent at 5:4-7).

I agree with Defendant. This is lexicography, and both a “group” and a “zone” are “virtual device[s].”

The specification defines a “virtual device [as] a device which presents a single proxy interface to a collection of networked media devices to allow for a single control interface to those devices.” (‘294 patent at 4:61-64). The specification makes clear that a virtual device “represents a set of physical devices on a network and appears on the network as an additional physical device that is separate from the physical devices in the set despite the fact that the virtual device is not a separate physical device.” (‘294 patent at 4:64-66 (“a virtual device is a networked device that does not have a conventional hardware manifestation”), 5:7-9 (“Virtual devices are discoverable on a network in the same way as physical devices.”)).

Accordingly, I adopt Defendant’s proposed construction as my own.

- 5. “provide/providing those device control signals to the devices,” “providing those signals to the devices,” “providing respective corresponding device signals to the**

devices,” “providing respective corresponding device control signals to each of the multimedia playback devices” (‘294 patent, claims 1, 13, 18, 19, 25, 26)

- a. *Plaintiffs’ proposed construction:* plain and ordinary meaning
- b. *Defendant’s proposed construction:*

“provide/providing those device control signals to the devices,” “providing those signals to the devices,” “providing respective corresponding device signals to the devices”:
“send/sending respective corresponding device control signals over the network to at least two devices, where the at least two devices can include either (i) the leader itself and at least one other device or (ii) at least two devices other than the leader itself”

“providing respective corresponding device control signals to each of the multimedia playback devices”: *“send/sending respective corresponding device control signals over the network to each of the multimedia playback devices, including the leader itself”*

- c. *Court’s construction:*

“provide/providing those device control signals to the devices,” “providing those signals to the devices,” “providing respective corresponding device signals to the devices”:
“send/sending respective corresponding device control signals over the network to at least two devices, where the at least two devices can include either (i) the leader itself and at least one other device or (ii) at least two devices other than the leader itself”

“providing respective corresponding device control signals to each of the multimedia playback devices”: *“send/sending respective corresponding device control signals over the network to each of the multimedia playback devices, including the leader itself”*

In a prior *Markman* opinion, I gave these terms their plain and ordinary meaning, and concluded that not all of the claims necessarily require the leader to deliver control signals to itself. (D.I. 137 at 21-23).

The issue here is one of scope. Defendant argues that “providing” control signals must occur “over the network.” (D.I. 280 at 12-15). Defendant draws a distinction between “providing” a control signal, which it says must occur over the network, and “defining” a control signal, which it equates to “internally generating” a control signal. (*Id.* at 13). Defendant urges that the ‘294 patent’s claim language confirms that “providing” means something different from “defining.” (*Id.*; *Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1579 (Fed.

Cir. 1996) (“If the terms ‘pusher assembly’ and ‘pusher bar’ described a single element, one would expect the claim to consistently refer to this element as *either* a ‘pusher bar’ or a ‘pusher assembly,’ but not both, especially not within the same clause. Therefore, in our view, the plain meaning of the claim will not bear a reading that ‘pusher assembly’ and ‘pusher bar’ are synonyms.”)). Claim 1 recites that the “group leader [is] configured to . . . *define* respective corresponding device control signals, and *provide* those device controls signals to the [two or more networked multimedia] devices thereby to implement the operational change across the group” (‘294 patent, claim 1) (emphasis added).

Plaintiffs respond “it is common sense that a device that defines device control signals for itself . . . could also provide those signals to itself.” (D.I. 294 at 6).²

I agree with Defendant. The claim language confirms that “defining” a control signal means “internally generating” a control signal. “Providing” a control signal must mean something different. The specification discloses an embodiment which indicates that “providing” is different from “defining” because it occurs “over the network,” and explains why a leader would “provide” control signals to itself “over the network.” In that embodiment, control signals are “provide[d]” to the group leader “over [the] network . . . irrespective of the fact that [the group interface] is provided by” the leader itself. (‘294 patent at 11:16-19). This is characterized as “redundancy [which] balances with simplicity.” (*Id.* at 11:19-20). It is redundant in that “the group exists within and shares the hardware of the leader wireless speaker

² Plaintiffs also argue that Defendant’s proposed construction would exclude preferred embodiments, but refer to sub-processes for “defining” a virtual device and “providing” a system control, which are different claim limitations than those at issue here. (D.I. 285 at 19-20; ‘294 patent, Fig. 1).

subsystem.” (*Id.* at 6:56-57). Furthermore, in every other embodiment, the control signals are “provided” over the network. (*See, e.g.*, ‘294 patent at 5:51-54, 10:18-61).

Accordingly, I adopt Defendant’s proposed construction as my own.

My construction is consistent with the embodiments discussed in the last *Markman* opinion. The specification states, “In other embodiments wireless speaker subsystem 201 [the leader] implements the operational change without the need for a device control signal to be sent from device 208 [the group] to wireless speaker subsystem 201 [the leader].” (‘294 patent at 11:20-23). Thus, “[t]he fact that the group leader is a member of the group does not . . . necessarily require that the group leader be provided with the control signals.” (D.I. 137 at 22). However, for the reasons discussed above, when the leader *is* “provided” with the control signals, those control signals must be provided “over the network.”

6. **“recording identifier corresponding to the recorded signal” (‘899 patent, claims 1, 19)**
 - a. *Plaintiffs’ proposed construction*: plain and ordinary meaning
 - b. *Plaintiffs’ alternative construction*: “an identifier automatically associated by a device with one or more recorded signals in a database”
 - c. *Defendant’s proposed construction*: “a recording identifier for a particular recorded signal”
 - d. *Court’s construction*: “a recording identifier for a particular recorded signal”

Defendant urges that I should clarify that a “recording identifier” is “*for a particular recorded signal.*” (D.I. 280 at 15) (emphasis added). Defendant asserts that the claim language itself supports this clarification. (D.I. 280 at 16). Defendant further asserts that the “purpose of the purported invention,” as set forth in the specification, “is to allow a user to store playback preferences for a particular recorded signal, such that the next time the ‘same’ recorded signal is played back[,] the system can automatically reproduce the recorded signal using ‘previously

stored preferences’ for the particular recorded signal.” (*Id.* at 16-17; ‘899 patent at 6:40-54). “If the ‘recording identifier’ did not identify a particular recorded signal,” argues Defendant, “there would be no way to determine which recorded signals have stored preferences and which do not, and the purpose of the invention would not be possible.” (D.I. 280 at 17).

Plaintiffs disagree, arguing that “corresponding to the recorded signal” does not necessarily mean the same thing as “for a particular recorded signal.” (D.I. 285 at 24). Plaintiffs also argue that using “particular” to modify “recorded signal” would read out the specification’s description of an “identifier that a user can use to play audio (a recorded signal) [which] can reference a playlist, disc, filename, or device.” (D.I. 285 at 24; ‘899 patent at 2:50-56, 6:11-16).³

I agree with Defendant. Its proposed construction is equivalent to the claim language of the disputed limitation, and clarifies the claim language so as to reflect the patent’s purpose. Plaintiffs’ citation to the specification for the proposition that a recording identifier can correspond to a playlist or device is unavailing. Those portions of the specification explain that recorded signals can be obtained from sources like playlists and devices. (‘899 patent at 2:50-56, 6:11-16).

Accordingly, I adopt Defendant’s proposed construction as my own. I include “a” at the beginning of my construction to map the claim language. (‘899 patent, claims 1, 19).

7. “previously stored preferences” (‘899 patent, claims 1, 19)

- a. *Plaintiffs’ proposed construction*: plain and ordinary meaning
- b. *Plaintiffs’ alternative construction*: “previously stored preferences automatically used by a device used during playback of the recorded signal”

³ Plaintiffs’ alternative proposal adds in the additional limitation that the relationship between the identifier and the recorded signal is “automatically associated by a device.” However, Plaintiffs cite no lexicography or disclaimer that supports this additional limitation. (D.I. 285 at 26; ‘899 patent at 6:52-53; *Toshiba Corp.*, 681 F.3d at 1369 (“Absent disclaimer or lexicography, the plain meaning of the claim controls.”)).

- c. *Defendant's proposed construction*: “previously stored preferences used to control how the recorded signal is played back”
- d. *Court's construction*: plain and ordinary meaning

“Absent disclaimer or lexicography, the plain meaning of the claim controls.” *Toshiba Corp.*, 681 F.3d at 1369.

Plaintiffs' alternative construction references a “device” and “automatic[] use[]” of “previously stored preferences,” but the claims reference no such “device” or “automatic[] use[].” Furthermore, Plaintiffs point to no lexicography or disclaimer that supports their alternative proposal. (D.I. 285 at 27-29).

Similarly, Defendant's proposed construction adds in the unclaimed limitation that “previously stored preferences” must be “used to control *how* the recorded signal is played back.” (Emphasis added). Defendant makes arguments that its proposal would not exclude the “preferences” tied to certain “modes” of system operation, such as “surround sound mode,” and that “all of the playback preferences described in the specification are used to control how a recorded signal is played back.” (D.I. 280 at 19; D.I. 291 at 19-20). However, this is not lexicography or disclaimer.

Accordingly, the plain meaning of the term controls. The language of the claims dictates that “previously stored preferences” are for “reproducing the recorded signal,” so the parties may argue whether or not certain “previously stored preferences” “reproduce[] the recorded signal.” ('899 patent, claim 1).

IV. CONCLUSION

Within three days the parties shall submit a proposed order consistent with this Memorandum Opinion.

absent my express permission, which will only be given if Denon does something that makes them relevant. Denon also requests that Sonos be prohibited from alleging that Denon infringes any of Sonos' products, or that it copied any of Sonos' technology. Sonos seems to agree Denon's infringement is generally irrelevant, but also seems to say that Denon's "copying" is relevant. At least right now, I do not see any relevance to whether Denon copied something or not. Such evidence is not relevant to infringement, invalidity (and I say that based on the understanding that Sonos' claim is not that one of the two asserted patents was copied from Sonos), or damages. The best that Sonos can do is to say that Denon's copying is relevant to refuting Denon's "story of early innovation." (D.I. 301-1 at 306). The story of early innovation has at best marginal relevance to the issues in the case, and accusations of "copying" are not going to be allowed to rebut such marginalia. The probative value is minimal; the unfair prejudicial value is great; and the probative value is substantially outweighed by the unfair prejudicial value. Rule 403. Thus, Denon's request to exclude evidence of its infringement of Sonos patents or that it copied Sonos's products and patents is **GRANTED**.

Denon MIL #3 (D.I. 301-1 at 295). Denon moves to exclude some inventor testimony of Aaron Graham, inventor of the '850 patent. (D.I. 301-1 at 308 n.17). Denon's motion is **DENIED** without prejudice to raising specific objections at trial. It is hard to tell how much is actually in dispute here. Denon cites no specific identifiable testimony, but seeks to exclude the inventor from doing claim construction or opining on the scope of the invention. Sonos responds that it does not intend to offer inventor testimony "to contradict the Court's claim construction or as an opinion on infringement, validity, or damages." (D.I. 301-1 at 309). Sonos, instead, says it will offer inventor testimony "to explain the inventions," "the problems existing in the art at that time, and how the inventions were or were not solutions to those problems." (*Id.*). Denon does

not seem to specifically respond to this proffer.

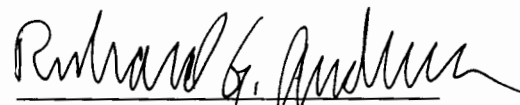
Sonos MIL #1 (D.I. 301-1 at 327). Sonos requests the exclusion of all of Denon's secondary considerations of non-obviousness on the grounds that there is no "nexus" between the various items and the patent's claims. The motion is too general to be resolved on the papers. Thus, the motion is **DENIED** without prejudice. That being said, part of the foundation for the admission of secondary considerations is the showing of nexus. The parties are **ORDERED** to meet and confer by February 23rd COB and identify the specific exhibits that are in dispute. Denon is to promptly file them, and by February 27th COB submit a letter explaining for each exhibit what the nexus is to the asserted claims of one of the two patents (as well as what the relevant secondary consideration is). Sonos is to file a responsive letter by February 28th COB, identifying which nexus arguments it objects to, and why.

Sonos MIL #2 (D.I. 301-1 at 330). Sonos seeks to exclude willfulness evidence as being insufficient. I think that D&M is right that this is just an untimely summary judgment argument. Thus, Sonos' motion is **DENIED** without prejudice to raising the issue as motion for judgment as a matter of law at the close of Plaintiff's case. I note that there seem to be admissions that Sonos knew of the '294 patent (issued July 26, 2011) by July 29, 2012, and of the '850 patent (issued June 28, 2010) by October 15, 2014, both of which gave Sonos pre-suit knowledge of the patents. Of course, by itself, that is not close to enough, but what the rest of the evidence may be is not well-developed in the papers submitted.

Sonos MIL #3 (D.I. 301-1 at 333). Sonos seeks to exclude damages evidence relating to the '294 patent based on a failure to mark "HEOS products" between March 2014 and "notice of this lawsuit on November 30, 2015." All claims of the '850 patent are method claims, as are ten of the twelve asserted claims of the '294 patent. It does not appear that Denon can resolve the

issue by dropping the two non-method asserted claims. *See Carnegie Mellon Univ. v. Marvell Tech. Group, Ltd.*, 906 F.Supp.2d 399, 406-08 (W.D. Pa. 2012); *Mformation Techs., Inc. v. Research in Motion Ltd.*, 830 F.Supp.2d 815, 836-38 (N.D. Cal. 2011). While those cases could be read to be relying upon the fact that the plaintiff not only asserted non-method claims but also lost those through court action, it seems a thin distinction as Plaintiff will have lost the two non-method claims if they are dropped at this late stage, as it will not be able to assert them against Defendant and the accused products. *See Unwired Planet, LLC v. Apple Inc.*, 2017 WL 1175379, *4 (N.D. Cal. Feb. 14, 2017) (“it makes no more intuitive sense . . . to let the patentee’s marking requirement stand or fall based on the course of litigation or the patentee’s mid-suit strategies”). On this motion, the Court could benefit from fuller briefing. Sonos says Denon had to mark because Denon was a licensee. Denon responds it was not the owner, but does not address its status as a licensee. Denon says it provided notice of the ‘294 patent in 2012 (which Sonos does not contest), but does not say it alleged that Sonos was infringing, and, as far as I can tell, neither side has provided the letter in question. It seems to me that there are probably no disputed facts on marking, and, if so, then maybe it can be resolved before the trial. Thus, Denon is **ORDERED** to provide a brief by the COB February 26th on the marking issue, Sonos may respond on February 27th, and Denon can reply on February 28th. The MIL is **TAKEN UNDER ADVISEMENT**.

IT IS SO ORDERED this 22 day of February 2018.


United States District Judge