

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE INC.,
Petitioner,

v.

PERSONAL AUDIO LLC,
Patent Owner.

Case IPR2015-00845
Patent 6,199,076 B1

Before MITCHELL G. WEATHERLY, DAVID C. McKONE, and
BRIAN P. MURPHY, *Administrative Patent Judges*.

McKONE, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

Lenovo (United States) Inc., Lenovo Holding Company, Inc., Lenovo Group Ltd., Google Inc., and Barnes & Noble, Inc., filed a Petition (Paper 6, “Pet.”) to institute an *inter partes* review of claims 1–6, 14, and 15 of U.S. Patent No. 6,199,076 B1 (Ex. 1001, “the ’076 patent”). Personal Audio LLC (“Patent Owner”) filed a Preliminary Response (Paper 14, “Prelim. Resp.”). Pursuant to 35 U.S.C. § 314, in our Decision to Institute (Paper 20, “Dec.”), we instituted this proceeding as to claims 1–4, 14, and 15, but not as to claims 5 and 6.

After institution of trial, we granted motions by Barnes & Noble Inc., Lenovo (United States) Inc., Lenovo Holding Company, Inc., and Lenovo Group LTD to terminate the proceeding as to those petitioners. Paper 26. Google Inc. (“Petitioner”) is the sole remaining petitioner.

Patent Owner filed a Patent Owner’s Response (Paper 32, “PO Resp.”), and Petitioner filed a Reply to the Patent Owner’s Response (Paper 34, “Reply”). An oral argument was held on June 16, 2016. Paper 41 (“Tr.”).

Petitioner relies on the testimony of Martin G. Walker, Ph.D. Ex. 1002 (“Walker Decl.”). Patent Owner relies on the testimony of Kevin C. Almeroth, Ph.D. Ex. 2016 (“Almeroth Decl.”).

We have jurisdiction under 35 U.S.C. § 6(c). This Decision is a final written decision under 35 U.S.C. § 318(a) as to the patentability of the challenged claims. Based on the record before us, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 4 are

unpatentable. Petitioner has not demonstrated, by a preponderance of the evidence, that claims 2, 3, 14, and 15 are unpatentable.

B. Related Matters

The '076 patent has been asserted in several lawsuits in the United States District Court for the Eastern District of Texas, including *Personal Audio, LLC v. Apple Inc.*, Civil Action No. 9:09-CV-111 (“*Apple Litigation*”). Pet. 4; Paper 12, 2–3.

The '076 patent was the subject of an *inter partes* review proceeding, *Microsoft Corp. v. Personal Audio, Inc.*, IPR2015-00494 (terminated Apr. 13, 2015). Paper 12, 2.

U.S. Patent No. 7,509,178 B2 (“the '178 patent”), is the subject of *Google Inc. v. Personal Audio LLC*, IPR2015-00846, which was argued simultaneously with this proceeding at the June 16, 2016, oral argument. The '178 patent is a divisional of the '076 patent.

C. References Relied Upon

U.S. Publication No. 2002/0177914 A1, published Nov. 28, 2002 (Ex. 1005, “Chase”);

U.S. Patent No. 4,811,315, issued Mar. 7, 1989 (Ex. 1007, “Inazawa”);

Shoshana Loeb, *Architecting Personalized Delivery of Multimedia Information*, VOL. 35, NO. 12 COMMUNICATIONS OF THE ACM 39–48 (Dec. 1992) (Ex. 1008, “Loeb”).

D. The Instituted Grounds

We instituted a trial on the following grounds (Dec. 36):

References	Basis	Claims
Chase and Loeb	§ 103(a)	1 and 4
Chase, Loeb, and Inazawa	§ 103(a)	2, 3, 14, 15

II. ANALYSIS

A. The '076 Patent

The '076 patent describes an audio program distribution system in which a host system organizes and transmits program segments to a player at a client subscriber location. Ex. 1001, Abstract. The player can be a laptop computer or personal computer with a mass storage device and sound reproduction components. *Id.* at 4:33–46.

A program includes compressed audio segments (e.g., MIDI files), text files, and image files. *Id.* at 5:47–6:12. These files are accompanied by a sequencing file, which contains the identification of highlighted passages and hypertext anchors within the program content, references to images, and the starting and ending offset locations in the audio presentation when each image display should begin and end. *Id.* at 6:13–19. The host server transmits (using file transfer protocol (“FTP”)) a download compilation file to the player. *Id.* at 6:51–55. The download compilation file identifies the program segments to be played during a session, which the player can download or confirm that it already has in local storage, as well as a session schedule file (also referred to as a sequencing file or program sequence file). *Id.* at 1–13, 8:29–44.

The program sequence file identifies the order in which downloaded program segments are to be played. *Id.* at 8:39–44. The recommended order can be based on user preference data collected by the server system. *Id.* at 8:42–44. Before a playback session begins, the user of the player can review and alter the provisional program selections and playback sequence. *Id.* at 8:45–48. The user can control playback using commands such as SKIP (causing the player to advance to the beginning of the next program segment) and BACK (operating like the SKIP command, but in the reverse direction). *Id.* at 15:21–44.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A player for reproducing selected audio program segments comprising, in combination:
 - means for storing a plurality of program segments, each of said program segments having a beginning and an end,
 - means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player,
 - means for accepting control commands from a user of said player,
 - means for continuously reproducing said program segments in the order established by said sequence in the absence of a control command,
 - means for detecting a first command indicative of a request to skip forward, and
 - means responsive to said first command for discontinuing the reproduction of the currently playing program segment and instead continuing the reproduction at

the beginning of a program segment which follows
said currently playing program in said sequence.

B. Claim Construction

We interpret claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2155–56 (2016). Claim terms generally are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *See In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

1. *“selected audio program segments” and “means for receiving and storing a file of data establishing a sequence”*

Claim 1 recites a “player for reproducing selected audio program segments,” the player comprising “means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player.”

In the Decision to Institute, we adopted the construction of “selected audio program segments” given by the District Court in the *Apple* Litigation, namely, “audio program segments that have been chosen by or for a user.” Dec. 8 (citing Ex. 1009, 48). We also adopted the District Court’s construction of “means for receiving and storing,” as reproduced in the table below. *Id.* at 17–21. In challenging our constructions, Patent Owner reads these two claim elements together, as explained below.

Patent Owner frames the issue as one in which the ’076 patent distinguishes its invention from systems, such as described in Chase

(discussed in detail below), in which a broadcaster chooses program segments for a disk jockey (“DJ”), who, in turn, plays the segments for listeners. PO Resp. 2–5. According to Patent Owner, the ’076 patent describes broadcast systems directed to general audiences as a key problem that the invention was intended to address. *Id.* at 2 (citing Ex. 1001, 1:19–30); *see also id.* at 19 (“This disclosure constitutes highly relevant evidence as to whether selections by a broadcaster’s ‘producer’ or ‘DJ’ for a [sic] general radio broadcasts meet the claim language ‘selected by or on behalf of a user.’”). The ’076 patent states that broadcast stations attempting to appeal to the same general listening audience results in duplicative programming, playing only the most acceptable programming, at times chosen by the broadcaster, to the exclusion of special interest programs. Ex. 1001, 1:19–30.

In contrast, Patent Owner argues, the ’076 patent repeatedly describes the use of a sequencing file created from the preferences of a listener to create a personalized playback program. PO Resp. 4–5 (citing Ex. 1001, 6:38–50, 8:38–44, 29:24–33). In these passages, the ’076 patent describes maintaining a “user data and usage log database,” Ex. 1001, 6:38–50, downloading a “recommended program sequence file” that includes an “initial selection and sequence being established based on user preference data,” *id.* at 8:38–44, and “allowing the content of the compilation to be tailored to the preferences of the subscriber, both through express selections made by the subscriber and by selections (or suggestions) made automatically by matching the subscriber[’]s known preferences and interests against descriptors which characterize the program[’]s segments,” *id.* at 29:24–33.

In the Preliminary Response, Patent Owner pressed this argument in its proposed construction of “means for receiving and storing a file of data establishing a sequence,” as recited in the body of claim 1. Prelim. Resp. 19–24. We rejected this distinction in the Decision to Institute. Dec. 17–21. Patent Owner now argues that the “means for receiving and storing a file of data establishing a sequence” incorporates the selection of program segments by a user or for a user based on user preferences, by virtue of the language “said program segments,” of “a file of data establishing a sequence in which said program segments are scheduled to be reproduced,” taking antecedent basis from the preamble language “selected audio program segments.” PO Resp. 14.

Patent Owner, therefore, now ties the ’076 patent’s description of providing tailored programming based on user preferences to the preamble language “selected audio program segments.” PO Resp. 13–21. Patent Owner argues that the *Apple* Court reached this conclusion and that we should follow suit. *Id.* at 15–17 (citing Ex. 1009, 42–44).¹ Patent Owner argues that “the ’076 patent clearly teaches the selected audio program segments are selected *based on user preference*.” *Id.* at 13–14 (emphasis added). According to Patent Owner,

[t]he District Court claim construction order (as well as the numerous examples it relies upon from the specification) makes clear that the requirement of ‘audio program segments’ being ‘selected [by] or [on] behalf of a user’ means that the audio

¹ Patent Owner misquotes our (and the District Court’s) construction of this language as being “audio program segments that have been chosen by *or on behalf of* a user,” rather than “audio program segments that have been chosen *by or for* a user.” PO Resp. at 13–14 (emphasis added); Dec. 8 (emphasis added).

program[s] have either been selected by a user or [have] been selected for the user *based on data about the user and his or her preferences*.

Id. at 16 (emphasis added).

We first address whether the preamble language “selected audio program segments” properly is considered a claim limitation and, relatedly, whether it provides antecedent basis for the “file of data establishing a sequence in which said program segments are scheduled to be reproduced,” recited in the “means for receiving and storing” limitation of claim 1. “In general, a preamble is construed as a limitation ‘if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.’” *Symantec Corp. v. Computer Associates Int’l, Inc.*, 522 F.3d 1279, 1288 (Fed. Cir. 2008) (quoting *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002)). “A preamble is not limiting, however, ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’” *Id.* (quoting *Catalina*, 289 F.3d at 808). The Federal Circuit has cautioned that “[a]bsent clear reliance on the preamble in the prosecution history, or in situations where it is necessary to provide antecedent basis for the body of the claim, the preamble ‘generally is not limiting.’” *Id.* (quoting *Catalina*, 289 F.3d at 809).

Patent Owner points out that, in the Decision to Institute, we ruled that “file of data establishing a sequence” should be read consistently with our construction of “selected audio program segments,” although we expressly declined to construe “file of data establishing a sequence” to require selections based on user preference data. Dec. 8–9. We also note that the District Court *sua sponte* raised the issue of whether the preamble of claim 1

is limiting, stating that “it appears to the court that construction of ‘selected audio program segments’ is necessary both to give meaning to the claim and to resolve the parties’ dispute.” Ex. 1009, 44–45 n.9. Nevertheless, Petitioner argues in reply that the preamble language “selected audio program segments” does not provide antecedent basis for “said program segments” in “a file of data establishing a sequence in which said program segments are scheduled to be reproduced.” Reply 8. Rather, Petitioner argues, antecedent basis is provided by “means for storing a plurality of **program segments**.” *Id.* (quoting claim 1).

We agree with Petitioner. The phrase “a plurality of program segments,” as recited in the “means for storing” of the body of claim 1, provides the antecedent basis for “said program segments,” in the “means for receiving and storing a file of data establishing a sequence,” making it unnecessary to look to “selected audio program segments,” as recited in the preamble of claim 1, for antecedent basis. *See Symantec*, 522 F.3d at 1288–89 (“[I]f [the preamble] is reasonably susceptible to being construed to be merely duplicative of the limitations in the body of the claim (and was not clearly added to overcome a rejection), we do not construe it to be a separate limitation.”).

Because “selected audio program segments” in the preamble of claim 1 does not provide antecedent basis for language in the body of the claim, antecedent basis does not provide a reason to construe the preamble as limiting. Patent Owner does not contend that the prosecution history provides a reason to construe the preamble as limiting.

We also have considered the reasoning of the District Court, in its Order Construing Claim Terms (Ex. 1009, 42–44), but disagree that, under a

broadest reasonable interpretation, the preamble is necessary to give life to claim 1. We understand the District Court's, and Patent Owner's, position to be that "selected audio program segments" is necessary to account for the Specification's description of how a sequence of programming files is selected. Ex. 1009, 42–43. The District Court reasoned that "Claim 1 of the '076 patent does not merely claim a player for reproducing 'audio program segments'; it claims a player for reproducing 'selected audio program segments.'" *Id.* at 43–44.

Specifically, the *Apple* Court observed that "[t]hroughout the description of the preferred embodiment of the invention, the patent's specification repeatedly discusses downloading to the player programming that has either been selected by the user, or has been selected for the user based on data about the user and his or her preferences." Ex. 1009, 42–43. The District Court cited to material in the Specification that overlaps with Patent Owner's citations, listed above. *Id.* at 43 (citing, *inter alia*, Ex. 1001, 6:41–48, 6:61–68, 8:20–23, 8:39–44). In light of this description, the District Court concluded:

The use of the word "selected" implies that the audio program segments reproduced by the player are not just any audio segments, but rather segments that have been picked or chosen for reproduction. The court concludes that a person of ordinary skill in the art reading the word "selected" in light of the numerous references in the specification to the user selecting programming or the host server selecting programming based on the user's preferences would understand that the "selected audio program segments" are audio program segments that have been chosen *by or for the user*. Accordingly, the court finds that "selected audio program segments" means "audio program segments that have been chosen *by or for a user*."

Id. at 44 (emphases added).

We are not persuaded that it is necessary to account for how audio program segments are selected in order to breathe life into claim 1. Rather, the body of the claim recites a complete invention without resort to the preamble. Claim 1 claims a “player,” an apparatus, that receives, stores, and plays audio program segments that have already been selected, and receives a file of data establishing the sequence for playing the audio program segments. Patent Owner has not explained persuasively why it is necessary to limit the claims to the method by which the audio program segments are selected and the file of data establishing the sequence is compiled. For example, Patent Owner has not explained how the file of data establishing the sequence would differ, structurally, based on the method by which the audio program segments are selected. Indeed, the structures identified by the District Court as corresponding to the “means for storing a plurality of program segments” and “means for receiving and storing a file of data establishing a sequence” (identified in detail in Section II.B.2.b below) are conventional structures that receive and store data regardless of how those data are selected, e.g., conventional high speed data modems and high speed RAM storage. Ex. 1009, 28–30, 51. Thus, we conclude that the preamble of claim 1 is not limiting.

Moreover, even if the preamble were limiting, we are not persuaded that “selected audio program segments” must be selected according to user preference data or that claim 1 otherwise excludes systems in which a broadcaster selects audio program segments for play by a DJ. The plain language of claim 1 includes no such requirements or exclusions. We also find no such requirements or exclusions in the Specification or in the District Court’s construction.

As to the Specification, we have considered the citations made by Patent Owner and the District Court (referenced above). In reply, Petitioner argues that the Specification includes additional embodiments in which audio program segments are selected in ways that are not based on user preference data. Reply 3–4. For example, program segments to be included in a schedule can be identified by evaluating “[t]he attributes of the subscriber (birthdate, sex, marital status, and household size)” to “identify programs and categories of programs likely to be of interest to a subscriber having those attributes.” Ex. 1001, 24:59–66.

We agree with Petitioner that the Specification describes examples of selecting audio program segments based on criteria other than user preference data. Patent Owner does not explain persuasively why we should restrict “selected audio program segments” to those chosen according to some examples in the Specification but not others.

Moreover, while the District Court was influenced by the examples described in the Specification, its ultimate claim construction did not limit the construction of “selected audio program segments” to those examples or include “based on user preference data” or the like. Petitioner points out that Patent Owner’s arguments to the District Court (at a *Markman* hearing) centered on the “selected audio program segments” more broadly being “specific to the individual who is operating that player” rather than being based on user preference data. Reply 4–5 (citing Ex. 1026, 116:7–118:7). Consistent with Patent Owner’s arguments at the *Markman* hearing, the District Court concluded that “audio program segments that have been chosen by or for a user” properly accounts for the full range of examples in the Specification. Ex. 1009, 43–44. Thus, we do not read the District

Court's construction, implicitly or otherwise, to include a requirement that audio program segments be selected based on user preference data.

Patent Owner argues that “[t]he construction ‘selected on or behalf of a user’ requires that the preferences of *a specific listener that is not a broadcaster* be considered when making the selection.” PO Resp. 15 (emphasis added). To the extent that Patent Owner seeks to limit “selected audio program segments” to program segments selected for a single listener, we agree with the District Court that “nothing in the intrinsic evidence limits the invention to use by only a single listener. For instance, when the claimed player is used in an automobile, a passenger may be able to operate the player as easily as the driver of the vehicle.” Ex. 1009, 44 n.8.

Patent Owner raises two additional arguments, both of which are unpersuasive. First, Patent Owner argues that the prosecution history of the related '178 patent shows that “‘selection on or behalf of a user’ was meant for the preferences of an individual user and not a mass audience.” PO Resp. 18. Patent Owner does not explain why statements made during a later-filed divisional, all of which were made after the '076 patent issued, are nevertheless relevant to the construction of the claims of the '076 patent.

Second, Patent Owner argues that a provision of the Copyright Statute, “excludes licenses for radio broadcasts ‘that enables a member of the public to receive a transmission of a program specially created for the recipient, or on request, a transmission of a particular sound recording . . . selected by or on behalf of the recipient.” *Id.* at 20 (quoting 17 U.S.C. § 114(d)(2)(A)(i)). Patent Owner concludes that “[i]n view of the specific usage of this phrase in the industry to described personalized audio programs for individuals like that discussed in the patent, one skilled in the art would

understand that broadcasts for general audiences like those of Chase are excluded from such language.” *Id.* Even if Patent Owner’s characterization of the Copyright Statute is correct, we are not persuaded that it is evidence of the understanding of a skilled artisan (rather than a copyright lawyer) such that it has any relevance to the construction of claim 1 or its application to Chase.

In sum, the preamble of claim 1, in particular the language “selected audio program segments,” is not limiting. Moreover, even if this preamble language were considered to be limiting, the full record supports our construction of “selected audio program segments,” namely “audio program segments that have been chosen by or for a user.” Those segments need not be selected based on user preference data.

Based on the full record, “a file of data establishing a sequence in which said program segments are scheduled to be reproduced” does not derive antecedent basis from “selected audio program files” and simply means “a file of data that identifies the order in which audio program segments are to be played.”

Finally, the “means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player,” recited in claim 1, does not carry with it a requirement that the program segments are selected based on user preference data. The complete construction of this term is addressed in our discussion of means-plus-function claim terms in Section II.B.2.b below.

2. *Means-plus-function terms*

a. *Legal Background*

The challenged claims recite limitations in “means-plus-function” format. “An element in a claim for a combination may be expressed as a means . . . for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6.² The United States Court of Appeals for the Federal Circuit stated: “Section 112, ¶ 6 recites a mandatory procedure for interpreting the meaning of a means- or step-plus-function claim element. These claim limitations ‘shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.’” *Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1320 (Fed. Cir. 1999) (quoting 35 U.S.C. § 112 ¶ 6); *see also In re Donaldson Co.*, 16 F.3d 1189, 1193–94 (Fed. Cir. 1994) (“[P]aragraph six applies regardless of the context in which the interpretation of means-plus-function language arises, i.e., whether as part of a patentability determination in the PTO or as part of a validity or infringement determination in a court.”). We construe such a limitation by determining what the claimed function is and identifying the structure or materials disclosed in the specification that correspond to the means for performing

² Section 4(c) of the AIA re-designated 35 U.S.C. § 112 ¶ 6, as 35 U.S.C. § 112(f). Pub. L. No. 112-29, 125 Stat. 284, 296–97 (2011). Because the ’076 patent has a filing date before September 16, 2012 (effective date of the AIA), we refer to the pre-AIA version of 35 U.S.C. § 112 in this Decision.

that function. *See Kemco Sales, Inc. v. Control Papers Co.*, 208 F.3d 1352, 1360 (Fed. Cir. 2000).

For computer-implemented inventions, this corresponding structure must be more than a general purpose computer or microprocessor. *See Aristocrat Techs. Australia Pty Ltd. v. Int'l Game Tech.*, 521 F.3d 1328, 1333 (Fed. Cir. 2008). Rather, “[w]hen dealing with a ‘special purpose computer-implemented means-plus-function limitation,’ [the Federal Circuit] require[s] the specification to disclose the algorithm for performing the function.” *Function Media, L.L.C. v. Google, Inc.*, 708 F.3d 1310, 1318 (Fed. Cir. 2013); *accord Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1384 (Fed. Cir. 2009) (“[W]hen a computer is referenced as support for a function in a means-plus-function claim, there must be some explanation of how the computer performs the claimed function.”).

b. Terms Construed in the Apple Litigation

The District Court in the *Apple* Litigation construed many of the means-plus-function terms, in various orders, including an Order Construing Claim Terms (Ex. 1009), an Order Denying Defendant’s Motion for Summary Judgment of Indefiniteness (Ex. 1010), an Order Granting in Part a Motion for Reconsideration of the Summary Judgment Order (Ex. 1011), and an Order on a Motion for JMOL (Ex. 1012). Upon consideration of the District Court’s reasoning and the arguments of the parties, we adopted these constructions, in whole or in part. Dec. 11–23. Although we are not bound by the District Court’s constructions, we consider its reasoned analysis. *Cf. Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326 (Fed. Cir. 2015) (“The fact that the board is not generally bound by a previous judicial

interpretation of a disputed claim term does not mean, however, that it has no obligation to acknowledge that interpretation or to assess whether it is consistent with the broadest reasonable construction of the term.”).

In their recitations of corresponding structure, several of these constructions refer to a “general purpose computer.” Addressing an argument by Patent Owner that the constructions should, instead, recite “a computer acting as a client,” we noted in the Decision to Institute that general purpose computers could include portable computers or personal digital assistants (“PDAs”). Dec. 16–17. Patent Owner no longer argues a distinction based on a general purpose computer as opposed to a computer acting as a client. On the complete record, we maintain our constructions.

For the “means for detecting a first command” (claim 1) and “means for detecting a second command” (claim 2), we modified the corresponding structure recited by the District Court by changing “if-then-else” to “conditional,” noting that an “if-then-else” programming construct is an example of a “conditional” programming construct, and that the record did not indicate that the corresponding structure should be limited to one particular conditional programming construct to the exclusion of others (e.g., “when/then/else” constructs). Dec. 22–23. We maintain this modification to the District Court’s construction on the full record.

We address the parties’ arguments regarding the language “file of data establishing a sequence” as it pertains to the construction of “means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player” in Section II.B.1 above.

The parties do not challenge our constructions further. We maintain the constructions on the full record. These constructions are summarized in the table below, with citations to the District Court constructions and to our constructions in the Decision to Institute:

Claim Term	Construction in the Decision to Institute
“means for storing a plurality of program segments” (claim 1)	Function: Storing a plurality of program segments. Corresponding structure: 1. A data storage system consisting of both high speed RAM storage and a persistent mass storage device, such as a magnetic disk memory; or 2. A replaceable media, such as an optical disk cartridge; and equivalents thereof. Ex. 1009, 51; Dec. 17–21.
“means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player” (claim 1)	Function: Receiving and storing a file of data establishing a sequence. Ex. 1009, 30. Corresponding structure as to the “receiving” function: 1. A conventional high speed data modem and modem dial up driver software for connecting via conventional dial up telephone SLIP or PPP TCP/IP series data communication link to an Internet service provider which provides access to the Internet; 2. An ISDN or cable modem link for connecting to an Internet service provider which provides access to the Internet; 3. Cellular radio, cellular phone, or satellite links;

Claim Term	Construction in the Decision to Institute
	4. A radio or infrared link for connecting to a local communications server computer linked to the Internet; 5. A place in which a replaceable media, such as an optical disk cartridge, may be inserted into the player; or 6. A direct link implemented using the Cellular Digital Packet Data (CDPD) service for providing access to the Internet using the TCP/IP protocol. and equivalents thereof. Ex. 1009, 28, 30. Corresponding structure as to the “storing” function: 1. A data storage system consisting of both high speed RAM storage and a persistent mass storage device, such as a magnetic disk memory; or 2. A replaceable media, such as an optical disk cartridge. and equivalents thereof. <i>Id.</i> at 29–30; Dec. 17–21.
“means for accepting” (claim 1); “input means for accepting” (claim 14)	Function: accepting control commands from a user. Corresponding structure: 1. A microphone, sound card, and conventional speech recognition software; 2. A keyboard; 3. A pointing device such as a mouse, trackball, or touchpad; or

Claim Term	Construction in the Decision to Institute
	4. A hand controller connected by an infrared link to the player computer. and equivalents thereof. Ex. 1010, 15–16; Dec. 11–12, 16–17.
“means for continuously reproducing” (claim 1)	Function: continuously reproducing said program segments in the order established by said sequence in the absence of a control command. Corresponding structure: A sound card that includes a digital to analog converter; headphones or one or more speakers; and a general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 233, 235, 237, 239, and 261 and more fully described at column 12, line 16 to column 13, line 11 and column 34, line 28 to column 35, line 44. Specifically, this algorithm includes the following steps: (1) beginning playback with the program segment identified by the ProgramID contained in the Selection_Record specified by the CurrentPlay variable; (2) when the currently playing program segment concludes, incrementing the CurrentPlay variable by one and fetching and playing the program segment identified by the ProgramID contained in the next Selection_Record in the sequencing file; (3) repeating step (2) until the last Selection_Record in the sequencing file is reached, which resets the CurrentPlay variable to “1” to begin the playing sequence again

Claim Term	Construction in the Decision to Institute
	with the first Selection_Record in the sequencing file. and equivalents thereof. Ex. 1010, 22; Ex. 1011, 11–12; Ex. 1012, 66–67; Dec. 12–13, 16–17.
“output means” (claim 14)	Function: producing audible sounds in response to analog audio signals. Corresponding structure: 1. One or more speakers; or 2. Headphones. and equivalents thereof. Ex. 1009, 52; Dec. 15–17.
“processing means for translating” (claim 14)	Function: translating said digitally recorded audio program segments into analog audio signals delivered to said output means for reproducing said recorded program segments in a form audible to said user. Corresponding structure: A sound card that includes a digital to analog converter and directs the converted analog audio signals to headphones or one or more speakers, and equivalents thereof. Ex. 1010, 35; Dec. 15–17.
“means for detecting a first command” (claim 1)	Function: detecting a first command indicative of a request to skip forward. Corresponding structure: A general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 261, 262, and 275. Specifically, this algorithm includes the following steps: (1) determining whether input from the means for accepting control commands is a command

Claim Term	Construction in the Decision to Institute
	using a conditional programming construct; and (2) if the input is a command, using a “branch” programming construct to select one of the player’s available commands, which include a “Skip” command, for execution. and equivalents thereof. Ex. 1010, 25–26; Dec. 21–23.
“means responsive to said first command” (claim 1); “processing means responsive to a first one of said control commands” (claim 14)	Function: in response to a “Skip” command, discontinuing the reproduction/translation of the currently playing program segment and instead continuing the reproduction/translation at the beginning of a program segment which follows said currently playing program in said sequence. Corresponding structure: A general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 269 and 235 and more fully described at column 15, lines 21 to 25 and column 34, line 28 to column 35, line 48. Specifically, this algorithm includes the following steps: (1) scanning forward in the sequencing file to locate the next Selection_Record of the appropriate LocType; (2) resetting the CurrentPlay variable to the record number of that Selection_Record; and (3) fetching and playing the program segment identified by the ProgramID contained in the new Selection_Record. and equivalents thereof.

Claim Term	Construction in the Decision to Institute
	Ex. 1010, 30–33; Ex. 1011, 12–15; Dec. 13, 16–17.
“means for detecting a second command” (claim 2)	Function: detecting a second command indicative of a request to skip backward. Corresponding structure: A general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 261, 262, and 278. Specifically, this algorithm includes the following steps: (1) determining whether input from the means for accepting control commands is a command using a conditional programming construct; and (2) if the input is a command, using a “branch” programming construct to select one of the player’s available commands, which include a “Back” command, for execution. and equivalents thereof. Ex. 1010, 26; Dec. 21–23.
“means responsive to a single one of said second commands” (claim 2); “processing means responsive to a second one of said control commands” (claim 14)	Function: in response to a [single] “Back” command, discontinuing the [reproduction/translation] of the currently playing program segment and instead continuing the [reproduction/translation] at the beginning of said currently playing program. Corresponding structure: A general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 269 and 235 and more fully described at column 15, lines 49 to 59. Specifically, this algorithm includes the following steps:

Claim Term	Construction in the Decision to Institute
	(1) if the currently playing program segment has played for a predetermined amount of time, resetting the playback position to the beginning of the program segment; and (2) playing the program segment from its beginning. and equivalents thereof. Ex. 1010, 31, 33; Ex. 1011, 13, 15; Ex. 1012, 68–69, 71; Dec. 14, 16–17.
“means responsive to the detection of two consecutive ones of said second commands” (claim 3); “means responsive to the detection of two consecutive ones of said second control commands” (claim 15)	Function: in response to two consecutive “Back” commands, discontinuing the [reproduction/translation] of the currently playing program segment and instead continuing the [reproduction/translation] at the beginning of a program segment which precedes the currently playing program segment. Corresponding structure: A general purpose computer programmed to perform the algorithm that is illustrated in the flow chart of Figure 3 at items 269, 235, 261, 262, and 278 and more fully described at column 15, lines 49 to 59 and column 34, line 28 to column 35, line 53. Specifically, this algorithm includes the following steps: (1) in response to a first “Back” command, if the currently playing program segment has played for a predetermined amount of time, resetting the playback position to the beginning of the program segment and playing the program segment from its beginning; (2) in response to a second “Back” command, if the currently playing program segment has not yet played for said predetermined amount

Claim Term	Construction in the Decision to Institute
	of time, scanning backward in the sequencing file to locate the previous Selection_Record of the appropriate LocType; (3) resetting the CurrentPlay variable to the record number of that Selection_Record; and (4) fetching and playing the program segment identified by the ProgramID contained in the new Selection_Record. and equivalents thereof. Ex. 1010, 31–32; Ex. 1011, 13–14; Ex. 1012, 69; Dec. 14–17.

C. Obviousness over Chase and Loeb

Petitioner contends that claims 1 and 4 would have been obvious over Chase and Loeb. Pet. 29–43. A claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are “such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). We resolve the question of obviousness on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations. See *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). “[T]he strength of *each* of the *Graham* factors must be weighed in every case and must be weighted en route to the final determination of obviousness

or non-obviousness.” *WBIP, LLC v. Kohler Co.*, 2015-1038 (Fed. Cir. July 19, 2016), slip op. at 11.

In an obviousness analysis, some reason must be shown as to why a person of ordinary skill would have combined or modified the prior art to achieve the patented invention. *See Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008). A reason to combine or modify the prior art may be found explicitly or implicitly in market forces, design incentives, the “interrelated teachings of multiple patents,” “any need or problem known in the field of endeavor at the time of invention and addressed by the patent,” or the background knowledge, creativity, and common sense of the person of ordinary skill. *Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1328–29 (Fed. Cir. 2009) (quoting *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418–21 (2007)).

1. Level of Skill in the Art

Petitioner argues that a skilled artisan would have had a Bachelor’s degree in computer science or electrical engineering and approximately two to three years of programming experience. Pet. 23 (citing Ex. 1002 ¶ 16). Although Patent Owner does not propose a level of skill in its Response, Dr. Almeroth proposes a similar level of skill in his Declaration. Ex. 2008 ¶ 3 (“the equivalent of a four-year degree from an accredited institution in either computer science or computer engineering with a concentration of courses in programming and the development and use of hardware and software, and approximately two to three years of programming experience or additional graduate education that could substitute for this experience”). We find that Petitioner’s statement of the level of skill in the art is supported

by the evidence and is reflected by the prior art or record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

2. *Scope and Content of the Prior Art*

a. *Overview of Chase*

Chase describes a method and system for a national radio broadcaster to create radio programs and distribute them to local affiliate radio stations. Ex. 1005 ¶¶ 5, 7, 23. In one example, a delivery subsystem assembles data files, audio files and a “play list file,” into a single “envelope,” and directs it to an individual affiliate terminal. *Id.* ¶ 41.

According to definitions provided in Chase, an “Audio Program” is “[o]ne or more audio segments grouped on a playlist and delivered to at least one affiliate terminal”; an “Audio Segment” is “[a]n audio event containing a continuous sequence of audio signals having defined beginning and ending points”; and a “Playback List” is “[a]n outline or log, associated with a particular audio program, containing information uniquely identifying each audio segment/clip/event within the associated audio program.” *Id.* ¶ 36. “[A] play list is represented by a directory,” and “[i]n the directory is a file which is always named with the same name as the directory but has the extension ‘TXT’. This is an ASCII representation of the play list.” *Id.* ¶ 202.

An example affiliate terminal is shown in Figure 4, reproduced below:

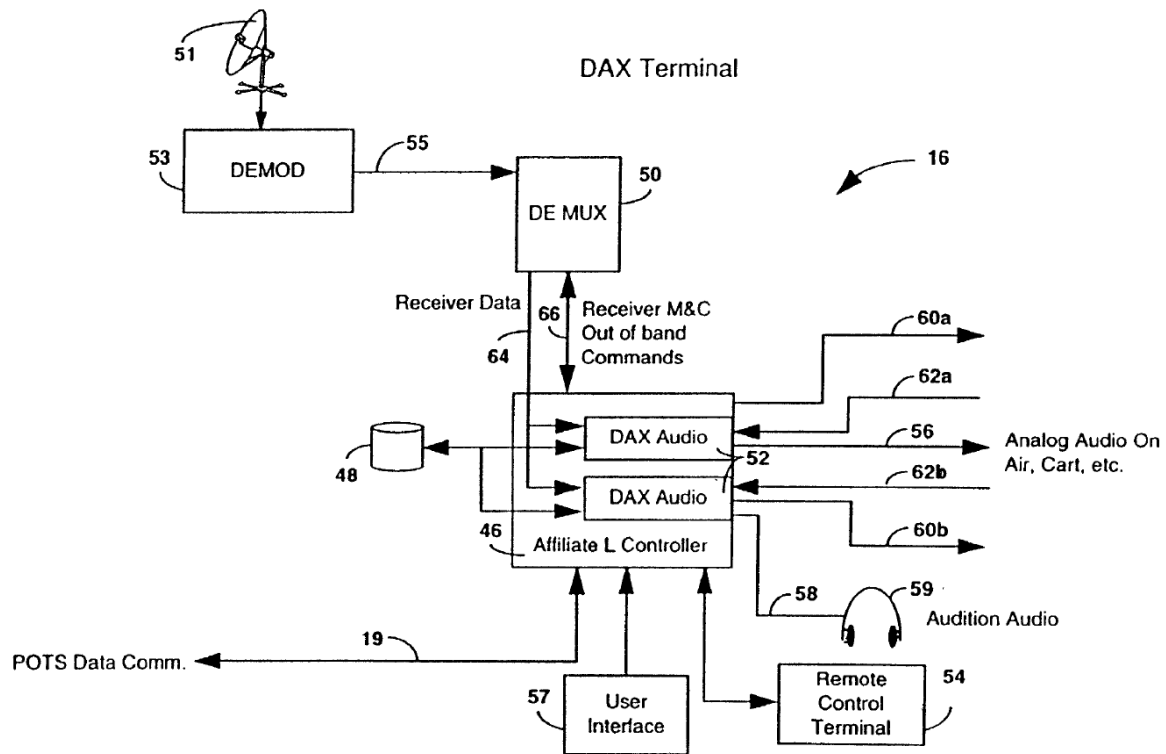


Fig. 4

Figure 4 is a block diagram of an affiliate terminal. *Id.* ¶ 27. Affiliate terminal 16 includes antenna 51 and demodulator 53 for receiving and demodulating data files, such as audio segments, audio programs, and playback lists. *Id.* ¶ 65. Affiliate controller 46 (e.g., a personal computer) receives the data files and stores them on memory 48 (e.g., a hard disk drive). *Id.* ¶¶ 42, 66. Affiliate controller 46 includes digital audio card (“DAC”) 52, with a digital signal processor (“DSP”) for decoding audio signals. *Id.* ¶¶ 66, 71. Affiliate terminal 16 outputs an audio signal over analog output line 56 for broadcast by the station. *Id.* ¶ 67.

Remote control terminal 54 (shown in more detail in Figure 5) provides control of the affiliate terminal, for example from within a DJ

booth. *Id.* ¶ 184. The audio program plays back automatically, without intervention by the remote control terminal, in a sequence determined by the play list. *Id.* The remote control terminal can override this sequence. *Id.* For example, a DJ can start play of the next queued audio segment, stop play of the current segment, and fast forward or rewind through the current segment or to a next/previous segment. *Id.* ¶ 186.

Chase refers to and incorporates source code appendixes, submitted along with the application. *Id.* ¶¶ 2, 4. Petitioner includes these as Exhibit 1015.

b. Overview of Loeb

Loeb is an article on information filtering that describes, *inter alia*, a “LyricTime” personalized music system. Ex. 1008, 6. LyricTime plays songs on a listener’s workstation. *Id.* The listener can control LyricTime “to stop and start playing at any time, step forward and backward through the list of selected songs, change the volume, bias the selection of the filter by clicking on a ‘mood’ button, and provide evaluative feedback on the current song.” *Id.* LyricTime includes an “interface [that] contains buttons for controlling the playing of songs. These buttons allow the listener to step backward and forward through the list of selected songs, play the current song, and stop playing.” *Id.* at 7.

*3. Differences Between the Prior Art and Claims 1 and 4;
Reasons to Combine*

Regarding claim 1, Petitioner contends that Chase’s affiliate terminal is a “player” that receives “audio program segments” (Chase’s “audio

segments” or “audio files”) and stores those segments in a “means for storing” (Chase’s memory 48). Pet. 29–30. Consistent with the corresponding structure stated above, we find that Chase’s memory 48 is a “means for storing a plurality of program segments, each of said program segments having a beginning and an end.”

Regarding “means for receiving and storing a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player,” as recited in claim 1, Petitioner cites to Chase’s satellite antenna 51 as receiving a play list file and memory 48 as storing the play list file. Pet. 30 (citing, *inter alia*, Ex. 1005 ¶ 66). We find that these structures meet the corresponding structures stated in our construction above.

Regarding “a file of data establishing a sequence,” as recited in claim 1, Petitioner cites to Chase’s play list file. *Id.* Chase describes a “Playback List” that is “[a]n outline or log, associated with a particular audio program.” Ex. 1005 ¶ 36. While Chase explains that “a play list is represented by a directory,” Chase makes clear that “[i]n the directory is a file which is always named with the same name as the directory but has the extension ‘TXT’. This is an ASCII representation of the play list.” *Id.* ¶ 202. Paragraph 205 provides an example play list that is a sequence of records. *Id.* ¶ 205. We find that Chase’s play list file is “a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player,” as recited in claim 1.

Patent Owner argues that Dr. Walker was unable, during his deposition, to identify where in Chase’s source code appendix the code reads or uses the sequence of a text file. PO Resp. 8 n.2 (citing Ex. 2015, 84–100). We have reviewed this testimony and find no such admission.

Rather, Dr. Walker testified that a playlist.txt file is used to initialize a TreeNode data structure but was unable to identify, to Patent Owner's satisfaction, the precise lines of code that did so. Ex. 2015, 84–100. Nevertheless, Patent Owner does not argue that Dr. Walker's alleged failure results in Petitioner failing to prove any specific limitation of the challenged claims.

Patent Owner argues that Chase does not disclose a sequencing file that is chosen by or on behalf of a user. PO Resp. 13–21. As to which limitation of claim 1 Patent Owner contends is missing from Chase, Patent Owner cites the relationship of several limitations. Specifically, Patent Owner argues that the “means for receiving and storing” refers to “a file of data establishing a sequence in which said program segments are scheduled to be reproduced by said player,” which, Patent Owner argues, derives antecedent basis from “selected audio program segments,” recited in claim 1's preamble. *Id.* at 14. As we understand it, Patent Owner contends that “selected audio program segments” must be selected based on user preference data for a single listener (rather than segments chosen by a broadcaster for a mass audience). *Id.* at 14–21. Because of the alleged antecedent basis, Patent Owner argues, the “file of data establishing a sequence,” recited in claim 1, must reflect these user preference-based selections. *Id.* at 13–14.

Patent Owner argues that Chase's description of a broadcaster selecting segments and transmitting them to an affiliate station, at which a DJ plays the songs, does not meet this alleged requirement:

Respectfully, the Board erred by finding that a playlist meant to be played for a mass radio broadcast audience selected by a radio

broadcaster producer meets the “selected by or on behalf of the user” limitation. . . . The construction “selected on or behalf of a user” [“chosen by or for a user”] requires that the preferences of a specific listener that is not a broadcaster be considered when making the selection. A mass radio broadcast is meant for general audiences and is not directed toward the preferences of any specific non-broadcaster individual—and thus does not meet the claim limitation.

Id. at 15. According to Patent Owner, “[s]ince there is no mechanism in Chase for receiving a sequencing file concerning individual preferences of a listener rather than selections by a broadcaster for a general audience, the alleged sequencing file of Chase cannot meet the means for receiving and storing limitations.” *Id.* at 21.

As explained in Section II.B.1 above, the preamble of claim 1 is not limiting and, in any case, does not provide antecedent basis for “a file of data establishing a sequence” recited in the “means for receiving and storing.” Moreover, as also explained in that section, even if the preamble is limiting, the “selected audio program segments” of claim 1 are simply “audio program segments that have been chosen by or for a user” and are not required to be selected based on user preference data and are not limited to a single user. Nor does this claim language, as construed, exclude audio program segments selected by a broadcaster for play by a DJ, who would be a user. Thus, even if the preamble of claim 1 is limiting, we find that Chase teaches “a file of data establishing a sequence” (play list file) that reflects audio segments chosen for a user (the DJ).

Petitioner contends that remote control terminal 54 of Chase’s affiliate terminal 16, which includes various control keys to enable starting, stopping, and moving through audio segments, is a “means for accepting control

commands from a user of said player,” as recited in claim 1. Pet. 31. In the alternative, if we were to determine that claim 1 is limited to use by a single listener (which would exclude Chase’s radio DJ), Petitioner cites to Loeb as teaching a personalized music system played at a listener’s workstation and argues that this teaching could have been applied predictably to Chase.

Id. at 31–32. As explained in Section II.B.1 above, we are not persuaded that claim 1 is limited to use by a single listener. Thus, we do not reach whether a skilled artisan would have incorporated this aspect of Loeb. We find that Chase’s remote control terminal 54 meets the corresponding structure stated in our construction of the “means for accepting” recited in claim 1.

Petitioner contends that the “means for continuously reproducing,” recited in claim 1, is taught by Chase’s disclosure of an affiliate terminal, which in the absence of a control command, plays programs in a play list based on the order of the play list. Pet. 32 (citing Ex. 1005 ¶ 184).

Petitioner argues that a conventional personal computer includes a sound card with a digital to analog converter. *Id.* at 32–33 (citing Ex. 1005 ¶¶ 66, 71–72, 80–83).

As set forth in our construction above, the structure corresponding to the “means for continuously reproducing” includes a general purpose computer programmed to perform certain algorithms. As to this aspect, Petitioner provides a detailed mapping of Chase’s source code appendixes to the corresponding structure identified in our claim construction. *Id.* at 32–36 (citing Ex. 1015). Patent Owner does not challenge that mapping. We find that the structure identified by Petitioner meets the corresponding structure

stated in our construction of the “means for continuously reproducing” recited in claim 1.

Regarding the “means for detecting a first command indicative of a request to skip forward,” as recited in claim 1, Petitioner cites to Chase’s description that “[t]he DJ may also request, through the remote control terminal, that the DAC 52 start play of the next segment queued in the DAC 52.” Pet. 37 (citing Ex. 1005 ¶ 186). Petitioner points to this disclosure, along with software from Chase’s source code appendix that Petitioner maps to (1) an “if-then-else” programming construct to determine whether input from the means for accepting control commands is a command (GetCommand function) and (2) a “branch” programming construct (ProcessCommands function) to select a command to stop the playing of an audio element (CMD_STP) and a command to read and play the next audio element (CMD_RNE and CMD_PLY). Pet. 37–38. As explained in our claim construction, an “if-then-else” construct is an example of a conditional programming construct. Patent Owner does not challenge that mapping. We find that the structure identified by Petitioner meets the corresponding structure stated in our construction of the “means for detecting a first command indicative of a request to skip forward” recited in claim 1.

Petitioner presents additional arguments regarding combining these constructs with the teachings of Loeb, to the extent that we conclude that claim 1 is limited to a single listener. Pet. 37–39. As explained above, claim 1 is not limited to a single listener. Thus, we do not address Petitioner’s additional arguments.

Regarding the “means responsive to said first command,” Petitioner argues that Chase’s affiliate terminal allows the DJ to discontinue playing a

currently playing segment and instead play the next segment in a playlist. Pet. 39–40 (citing Ex. 1005 ¶184). Petitioner further argues that Loeb describes a personalized music system with an interface that allows a listener to skip forward in a list of songs. Pet. 40 (citing Ex. 1008, 6, 7, 9). Petitioner argues that both Chase and Loeb teach the function of the “means responsive to said first command,” namely “in response to a ‘Skip’ command, discontinuing the reproduction of the currently playing program segment and instead continuing the reproduction at the beginning of a program segment which follows said currently playing program in said sequence,” but that neither “explicitly disclose[s] the exact 112 ¶ 6 construed structure” of this limitation. *Id.* at 41.

Petitioner argues that the precise structure would have been obvious to a skilled artisan in light of the programming structures actually disclosed in Chase’s software appendix. *Id.* at 41–42. In particular, Petitioner maps this software to an algorithm that includes scanning forward in a play list to find a next playable element and returning a pointer to the next element to a SetCurrentElement function, which invokes a CueElement function to configure the player to start playing the next element. Pet. 41. Petitioner argues that this code consists of common programming techniques and would have been applied predictably to implement Loeb’s teaching. *Id.* at 42. Dr. Walker testifies that “Chase discloses all parts of the algorithms for navigating to and starting reproduction of the next or previous programs in a sequence, by providing the source code for each step, including ‘rPlayer::Stop(),’ ‘rPlayer::FindNextElement(),’ ‘rPlayer::SetCurrentElement(),’ and ‘rPlayer::Play()’ functions.” Ex. 1002 ¶ 93. We credit this testimony.

Patent Owner argues that “Loeb fails to disclose the ability to discontinue a song while playing and advance to another audio program” and instead “discloses separate buttons that allow stepping forward, backward, and stopping.” PO Resp. 32. Loeb discloses that “[t]he listener is free to stop and start playing at any time, [and] step forward and backward through the list of selected songs.” Ex. 1008, 6. Figure 3 of Loeb depicts conventional controls for an audio device, including a stop button and a fast forward button “>>.” According to Loeb, “[t]he middle portion of the interface contains buttons for controlling the playing of songs. These buttons allow the listener to step backward and forward through the list of selected songs.” *Id.* at 7. We find that Loeb discloses the function of discontinuing the reproduction of the currently playing program segment and instead continuing the reproduction at the beginning of a program segment which follows said currently playing program in said sequence in response to a user pressing the “>>” button. The reference clearly discloses skipping ahead and playing the next song on the list in response to that button press. Patent Owner’s argument notwithstanding, we do not believe that Loeb teaches continuing to play the current song simultaneously with the next song on the list.

Petitioner argues that a skilled artisan would have combined the teachings of Chase and Loeb based on Loeb’s statement that its user interface “induces nearly instant acceptance and allows people to use the *LyricTime* prototype with almost no preparation.” Pet. 42 (quoting Ex. 1008, 6–7). As Petitioner points out (Pet. 39), the applicants for the ’076 patent admitted, during prosecution, that “conventional CD players allow the user to skip forward to the beginning of the next track on the disk or to skip

backward to preceding tracks.” Ex. 1003, 52. Dr. Almeroth admitted during deposition that, at least in terms of the skip function of conventional CD players, “you would stop playout of the particular track and then go to the next one.” Ex. 1025, 52:11–22.

Patent Owner argues that a skilled artisan would not have combined Chase and Loeb because they “***serve incompatible purposes.***” PO Resp. 25. According to Patent Owner, a skilled artisan would not have used the personal preferences for a single individual, as captured by Loeb’s algorithm, in a system, such as Chase, that is directed to distributed national broadcast programs. *Id.* at 25–26. Patent Owner argues that a goal of “a personalized player for an individual listener” would “*undermine the very reason* to distribute a sequencing file provided by a producer to a plurality of affiliate radio terminals over a communication link for broadcast.” *Id.* at 27. Patent Owner asserts that “the resultant device made by one skilled in the art from the combination of Loeb and Chase with the goal of making a personal player would not produce the claimed combination.” *Id.* at 28.

As stated by the Federal Circuit, “a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements.” *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012). “Rather, the test for obviousness is what the combined teachings of the references would have suggested to those having ordinary skill in the art.” *Id.* Petitioner does not seek to combine the devices of Chase and Loeb physically. Rather, Petitioner argues that Loeb describes an example of a conventional interface used for controlling a device that plays music and contends that features of that interface would have been recognized as advantageous for Chase’s affiliate terminal. We are persuaded that a skilled

artisan would have sought out examples of admittedly conventional interfaces to improve the functionality of Chase's affiliate terminal. *See KSR*, 550 U.S. at 417 (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”). To the extent that Patent Owner is arguing that the claims require a showing of distributing sequence files created based on the preferences of a single listener, we reject that argument above.

Patent Owner also argues that Chase teaches away from discontinuing any currently playing song to advance forward. PO Resp. 31. Thus, Patent Owner argues, “one would not combine this disclosure of Loeb in view of Chase's explicit teaching away of disabling playback controls while a song is playing.” *Id.* at 32 n.5. In particular, Patent Owner cites to Chase's description of a “jock box” that “[w]hile playing, . . . locks out all key presses except stop.” *Id.* at 32 (quoting Ex. 1005 ¶ 223). Citing to Dr. Almeroth's testimony, Patent Owner argues that this is consistent with radio broadcasts, as a radio broadcaster would not want a DJ to be able to advance a song forward while that song is playing on air. *Id.* (citing Ex. 2016 ¶ 56). As Petitioner points out (Reply 17), Dr. Almeroth has admitted that he does not have the expertise to opine on the expected behavior of DJs. Ex. 1025, 64:16–19 (“I really don't have the experience to say one way or the other. It would largely be anecdotal. I'm not sure I would be in a position to offer an expert opinion about what a DJ would do.”). We accord Dr. Almeroth's testimony little weight on this point.

We are not persuaded that Chase teaches away from discontinuing a currently playing song to advance to a next segment. According to Chase, “[t]he jock box is a physical representation of a DAC cart located in a studio. It provides 8 pushbuttons each with an LED and a small LCD display. Conceptually the jock box is a CD player with an automated changer.” Ex. 1005 ¶ 219. As explained above, and shown in Chase’s Figure 4, DAC 52 is a component separate from remote control terminal 54. The jock box is a “physical representation of a DAC cart.” *Id.* ¶ 219. We read this to be a typographical error and view the jock box as a physical representation of a DAC card, e.g., DAC card 52. If “cart” is not a typographical error, it could refer to a “cart machine” (*id.* ¶ 36), which also is a component separate from remote control terminal 54 (Figure 4 shows line 56 communicating with a cart, not shown). In either case, the description of a jock box, in paragraph 223, does not describe the behavior of remote control terminal 54. The behavior of remote control terminal 54 is described clearly elsewhere:

The DJ may also request, through the remote control terminal, that the DAC 52 start play of the next segment queued in the DAC 52, stop play of the current segment, fast forward/rewind through the current segment or to a next/previous segment. The DJ may use up/down arrows on the remote control terminal to scroll through a play list displayed to the DJ and select, out of turn, a segment from the play list.

Id. ¶ 186. This description is consistent with a device that can discontinue play of a current segment and skip to the next. Thus, Chase does not teach away from a player with that behavior.

We have considered Petitioner’s and Patent Owner’s competing evidence and argument and find that a skilled artisan would have had reason, with rational underpinning to combine the teachings of Chase and Loeb.

Dr. Walker testifies that Chase's source code appendix includes all the necessary software constructs to implement the algorithm of the "means responsive to said first command." Ex. 1002 ¶ 93. We credit this testimony. Patent Owner does not offer expert testimony rebutting Dr. Walker's analysis of Chase's source code. We find that using Chase's software constructs to implement what was admittedly the conventional controls listeners have used to navigate music segments would have been a predictable use of known components for their intended purposes. As explained above, we are not persuaded that Chase teaches away from this combination.

In sum, we find that Chase and Loeb teach each limitation of claim 1 and that a person of ordinary skill in the art would have had reason, with rational underpinning, to combine the teachings of Chase and Loeb.

Claim 4 depends from claim 1 and adds "wherein said sequence established by said data forms an endless circular sequence of program segments." In explaining its evidence of Chase's disclosure of the "means for continuously reproducing" recited in claim 1, Petitioner argues that, according to the software in the source code appendix, when the decoder reaches the last playable element of a playlist, the decoder starts over at the beginning of the list. Pet. 36. According to Petitioner, this teaches the endless circular sequence of program segments recited in claim 4. *Id.* at 43. Patent Owner does not dispute this point. We agree with Petitioner, and find that Chase teaches "wherein said sequence established by said data forms an endless circular sequence of program segments," as recited in claim 4.

4. *Objective Indicia of Non-Obviousness*

Patent Owner contends that objective indicia, including lack of actual use of the prior art teachings until Apple introduced the iPod, widespread adoption of the invention after that, widespread acquiescence to licensing of the patent, and commercial success, evidence non-obviousness. PO Resp. 37–40. According to the Federal Circuit, “objective considerations of non-obviousness must be considered in *every* case.” *WBIP*, 2015-1038, slip op. at 11.

First, Patent Owner argues that “the lack of actual use from the teachings of the prior art is indicative of non-obviousness.” PO Resp. 37. “The length of the intervening time between the publication dates of the prior art and the claimed invention can also qualify as an objective indicator of nonobviousness.” *Leo Pharm. Prods., Ltd. v. Rea*, 726 F.3d 1346, 1359 (Fed. Cir. 2013).

Patent Owner argues that its expert, Dr. Almeroth, performed a survey of devices from the filing date of the '076 patent (in 1996) to 2000 and concluded that there were no applications of downloadable navigable playlists during that time period. PO Resp. 37. Here, Patent Owner points to Dr. Almeroth’s trial testimony in the *Apple* Litigation. *Id.* (citing Ex. 2017, 2692:1–5). Dr. Almeroth’s testimony, however, is conclusory, and does not identify the data or explain the methodology on which his conclusion is based. At deposition, Dr. Almeroth testified that, in the *Apple* Litigation, he “wrote a fairly lengthy report on this and testified, and I don’t remember the specific details.” Ex. 1025, 77:23–25. Patent Owner does not point to such a report in the record of this proceeding. On this record, Dr. Almeroth’s testimony is entitled to little weight. See 37 C.F.R. 42.65(a)

(“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”).

Patent Owner further argues that “[t]o this day, no person has attempted to modify a radio broadcast system similar to Chase to produce a personalized player in the manner asserted to be ‘obvious’ by Petitioners.” PO Resp. 37. Similarly, Patent Owner argues that although “radio broadcast systems have been around for decades and FTP had been around since the 1970s, none of the creators or companies involved with these products ever suggested anything similar to the claimed inventions.” *Id.* at 38. Patent Owner does not cite to any evidence in support of these arguments.

Patent Owner further argues that “no product provides the solution of a player capable of receiving a personalized audio program from a host over a communication link until the 2000s with the introduction of the Apple iPod and similar products.” *Id.* Patent Owner cites to Dr. Almeroth’s Declaration in this proceeding in support, arguing that it evidences a long-felt need for the invention “for decades.” *Id.* (citing Ex. 2016 ¶ 70). Dr. Almeroth’s testimony on this point is conclusory and does not cite to evidence. As such, it is entitled to little weight. *See* 37 C.F.R. 42.65(a). We find that Patent Owner has not shown a long-felt need for the invention of the ’076 patent.

Patent Owner argues that Dr. Almeroth concluded that once downloadable navigable playlists were introduced in devices around the year 2000, there was widespread adoption of this feature, and that Apple considered this feature crucial. PO Resp. 38. Patent Owner again relies on Dr. Almeroth’s trial testimony in the *Apple* Litigation. *Id.* (citing Ex. 2017, 2699:1–5). Dr. Almeroth’s testimony on this point also is conclusory and

does not explain its factual basis, other than to reference, generally, “the testimony of several Apple witnesses.” Ex. 2014, 2698:24–25. Patent Owner does not attempt to support its argument with citations to such witness statements. Dr. Almeroth’s testimony on this point is entitled to little weight. On this record, Patent Owner has not shown widespread adoption of the invention after alleged introduction around the year 2000.

Patent Owner also argues that the ’076 patent has been licensed by over fifteen companies, representing nearly 75 percent of the market, for over 30 million dollars. PO Resp. 39. Patent Owner does not introduce any such licenses into evidence. Rather, Patent Owner relies upon its technical expert, who merely repeats what he was told. Ex. 2016 ¶ 75. As Petitioner points out (Reply 24), Dr. Almeroth has admitted that he is not an expert in patent licensing and has never seen the actual license agreements. Ex. 1025, 95:7–9. Dr. Almeroth’s testimony again is entitled to little weight. In the absence of the licenses or any credible evidence of the contents of such licenses, Patent Owner has not shown that such licensing is relevant to obviousness.

Patent Owner argues that “a prior art study by some of the same companies failed to turn up any prior art that provided a path for invalidity.” PO Resp. 39. Again, Patent Owner does not point to results of the alleged study itself, but rather testimony from Dr. Almeroth about what he understood the study to have produced. Ex. 2016 ¶¶ 75–78. Petitioner argues that the study only offered rewards for prior art that was not already known to those conducting the study. Reply 24. Patent Owner has not offered evidence sufficient to conclude that a study failed to turn up invalidating prior art.

Finally, Patent Owner argues that commercial success evidences non-obviousness. PO Resp. 39. Specifically, Patent Owner points to the success of Apple's iPod devices. *Id.* Patent Owner argues that these devices have been adjudicated to infringe the challenged claims of the '076 patent and, therefore, there is a nexus between Apple's commercial success and the challenged claims. *Id.*

To show that Apple's iPod devices infringe the challenged claims, Patent Owner does not point to any adjudication. Rather, Patent Owner relies on the testimony of Dr. Almeroth, who repeats Patent Owner's statement that "Apple's iPod/iTunes and its progeny . . . have been adjudicated to infringe" the challenged claims. Ex. 2016 ¶ 71. Dr. Almeroth cites only to the Chase source code appendix (Ex. 1015), which appears to be a typographical error. Dr. Almeroth may have intended to cite to Exhibit 1012, the *Apple* Court's Order on Motions for JMOL declining to overturn a jury verdict of infringement as to a subset of the challenged claims (1, 3, and 15).

Patent Owner has not shown commercial success. First, Patent Owner has not shown a nexus between the alleged commercial success and the invention of the challenged claims. "To establish a proper nexus between a claimed invention and the commercial success of a product, a patent owner must offer 'proof that the sales were a direct result of the unique characteristics of the claimed invention—as opposed to other economic and commercial factors unrelated to the quality of the patented subject matter.'" *SightSound Techs. , LLC v. Apple Inc.*, 809 F.3d 1307, 1319 (Fed. Cir. 2015) (quoting *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996)). "[T]here is a presumption of nexus for objective considerations when the patentee shows

that the asserted objective evidence is tied to a specific product and that product ‘is the invention disclosed and claimed in the patent.’” *WBIP*, 2015-1038, slip op. at 12. In particular, “[i]f a product both ‘embodies the claimed features’ and is ‘coextensive’ with the claims at issue, ‘a nexus is presumed.’” *SightSound*, 809 F.3d at 1319 (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2000). “In other words, a nexus exists if the commercial success of a product is limited to the features of the claimed invention.” *Id.* On the other hand, “‘if the commercial success is due to an unclaimed feature of the device’ or ‘if the feature that creates the commercial success was known in the prior art, the success is not pertinent.’” *Id.* (quoting *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006)).

Patent Owner’s only evidence of nexus is its assertion that Apple’s iPod devices have been adjudicated to infringe the challenged claims of the ’076 patent and Dr. Almeroth’s unsupported assertion that he has reviewed the source code of unspecified iPod and iTunes products and concluded that they are commercial embodiments of the challenged claims. PO Resp. 39; Ex. 2016 ¶ 71. This is insufficient for us to presume nexus. Neither Patent Owner nor Dr. Almeroth identifies with any particularity which iPod devices have been adjudicated to infringe or have been analyzed by Dr. Almeroth. Nor has Patent Owner introduced any analysis comparing any iPod devices with the challenged claims, other than Dr. Almeroth’s conclusory statement that he reviewed source code. Ex. 2016 ¶ 71. We cannot conclude, based on this limited evidence, that the iPod devices adjudicated to infringe are “coextensive” with the challenged claims such that a nexus can be presumed. *See SightSound*, 809 F.3d at 1319.

Moreover, even if Patent Owner has established a presumption of nexus, we find that Petitioner has rebutted it. “The presumption of nexus is rebuttable: a patent challenger may respond by presenting evidence that shows the proffered objective evidence was ‘due to extraneous factors other than the patented invention.’ Such extraneous factors include additional unclaimed features and external factors, such as improvements in marketing.” *WBIP*, slip op. at 13 (quoting *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1393 (Fed. Cir. 1988)).

As Petitioner argues (Reply 24), Patent Owner’s own evidence suggests that other factors, beyond the features of the challenged claims, contributed substantially to Apple’s commercial success. Dr. Almeroth points to an online review of the “original iPod” as support for his opinion that “the success of the iPod is directly attributed to the features of the ’076 . . . patent.” Ex. 2016 ¶ 72 (citing Ex. 2019). As Petitioner points out (Reply 24), however, according to that article other factors beyond the playlist functionality, such as a “novel shape,” “unique controls” such as its click wheel, “easy syncing ability with iTunes,” and “the iTunes Music Store,” contributed to the iPod’s success. Ex. 2019, 2, 4. Dr. Almeroth’s citations to Exhibit 2020, an article discussing iTunes, and Exhibit 2021, an article discussing the iTunes Music Store, also do not provide persuasive evidence that the success of the iPod devices was due to the features of the challenged claims, as these articles do not focus on the features of the iPod devices. Ex. 2016 ¶ 24. Beyond this, Petitioner points to additional evidence that Apple’s commercial success was due to factors other than the invention of the challenged claims, in particular, marketing. Reply 24 (citing Ex. 1027). Upon consideration Patent Owner’s and Petitioner’s

evidence, we find that Petitioner has rebutted any presumption of a nexus between the challenged claims and the commercial success of iPod devices adjudicated to infringe those claims.

Second, Patent Owner has not provided any persuasive evidence of commercial success, such as sales, a definition of the relevant market, or the iPod device's performance in that market. *See In re Applied Materials, Inc.*, 692 F.3d 1289, 1300 (Fed. Cir. 2012) (“Just as the number of units sold without evidence of the market share is only weak evidence of commercial success, so too is an assertion of market share lacking in sales data.” (internal citation omitted)). The only evidence of commercial success introduced by Patent Owner is a statement in an online article that states, without citation to support, that “[t]he launch of the tiny music player [iPod] changed the world of consumer electronics and reshaped Apple. It can be argued that it's the most important product Apple ever introduced!” Ex. 2018, 6–7. Patent Owner's evidence is entirely conclusory.

In sum, we have considered Patent Owner's objective indicia of non-obvious and find them to be unpersuasive.

5. *Conclusion of Obviousness*

As explained above, the prior art teaches each limitation of claims 1 and 4. Petitioner has introduced persuasive evidence that a skilled artisan would have had reasons to combine the prior art to arrive at these claims. We have weighed Petitioner's evidence against the objective evidence presented by Patent Owner. We consider that objective evidence to be entitled to little weight for the reasons given above. In sum, upon consideration of all the evidence, including the evidence in the Petition and

Patent Owner's objective indicia of non-obviousness, we conclude that Petitioner has proved by a preponderance of the evidence that claims 1 and 4 would have been obvious over Chase and Loeb.

D. Obviousness over Chase, Loeb, and Inazawa

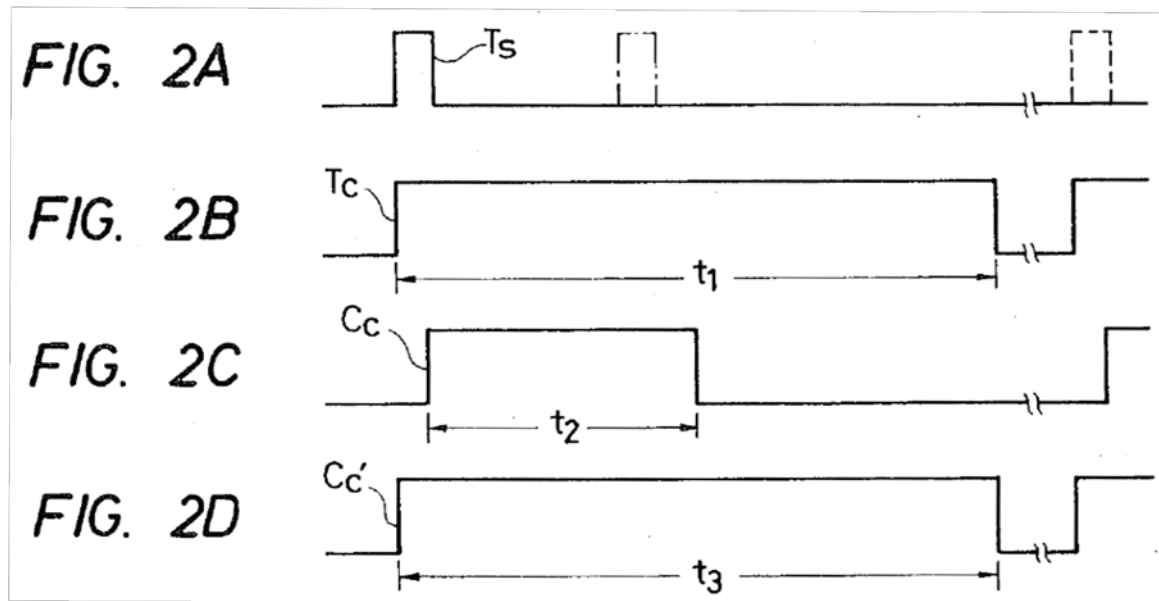
Petitioner contends that claims 2, 3, 14, and 15 would have been obvious over Chase, Loeb, and Inazawa.

1. Scope and Content of the Prior Art—Overview of Inazawa

Inazawa describes a disc player for reproducing audio information recorded on a digital audio disc. Ex. 1007, Abstract. Program information containing a plurality of partitions is recorded along with address data onto the disc. *Id.* at 2:66–3:4.

Inazawa describes push-button type controls for moving through program selections, for example a first program selecting key for making the disc player take a forward program selection mode and a second program selecting key for making the disc player take a reverse program selection mode. *Id.* at 3:43–62.

If partition N currently is being played and the second program selecting key (backward key) is pressed, the disc player starts a timer. This is illustrated in Figures 2A–2D, reproduced below:



Figures 2A–2D are waveform diagrams depicting timing signals. *Id.* at 2:59–61, 6:30–7:31. When a key input signal checker detects that the second program selection key has been pressed, starting signal T_S (shown in Figure 2A) starts a timer and generates control signal T_C (shown in Figure 2B). *Id.* at 6:30–37. The timer is chosen to be a time t_1 , longer than the time necessary for a person to press the second program selection key twice repeatedly, e.g., 1.5 to 2 seconds. *Id.* at 6:37–41. Figure 2C shows control signal C_C , formed by the system controller to begin when a drive control signal is first obtained corresponding to the press of the second program selection key and to have duration t_2 , supplying the address for the beginning of partition N as the current selection to play. *Id.* at 6:41–54, 6:5–16. Figure 2D shows signal C_C' as the logical sum of control signal C_C from the system controller and control signal T_C from the timer, with duration t_3 . *Id.* at 6:54–60.

If the second program selecting key is pressed a second time within t_3 (shown in Figure 2A as a dot-dash line), the address for partition N–1 is

supplied as the current selection to play and the disc player moves the optical head to partition N-1 and plays partition N-1. *Id.* at 6:61-7:20. If, on the other hand, a second key press comes after the duration of t_3 , it is treated the same as the first key press, i.e., the optical head is controlled to move to the beginning of partition N. *Id.* at 7:21-31.

2. Differences Between the Prior Art and Claims 2, 3, 14, and 15; Reasons to Combine

Claim 2 depends from claim 1 and adds recitations directed to a “skip backward” to the beginning of the current track function when a single command is detected. Claim 3 depends from claim 2 and adds a function to skip backward to a preceding track when two commands are detected.

Regarding a “means for detecting a second command,” as recited in claim 2, Petitioner cites Inazawa as teaching a program key that, when pressed, causes a compact disc player to skip to the beginning of the currently playing audio segment. Pet. 45. Petitioner argues that pressing this button causes the generation of a command indicative of a request to skip backward and receipt of that command by an operational circuit block. *Id.* at 45-46. As it does for the “means for detecting a first command,” recited in claim 1, Petitioner argues that Chase’s source code appendix teaches conditional and branch constructs used for detecting commands. *Id.* at 46. According to Petitioner, implementing a skip backward in software (using Chase’s constructs), rather than hardware (as in Inazawa’s example), would have been a mere design choice. *Id.* at 46-47.

As to a “means responsive to a single one of said second commands,” recited in claim 2, Petitioner contends that Inazawa teaches using a time

period as part of a program selection mode used to determine whether to reset the playback position to the beginning of the current audio segment or to the beginning of the previous segment and playing that segment from its beginning. Pet. 48–49. According to Petitioner, if Inazawa detects a key press during time t_3 , Inazawa’s system skips backward to the program at address N–1. *Id.* at 49. On the other hand, if the key press happens after the duration of t_3 , the system skips to the beginning of the current program at address N. *Id.* Petitioner points to this second scenario as the algorithm for the “means responsive to a single one of said second commands.” *Id.*

Petitioner identifies programming constructs in Chase’s software appendix for fetching and playing playable elements in a backward direction in a playlist. *Id.* at 47–48. Petitioner argues that it would have been a matter of design choice to use Chase’s software constructs to implement, in software, the algorithms that Inazawa describes for hardware. *Id.* at 47–50.

Patent Owner argues that “[b]y using the amount of time that the audio file has played to determine whether one skips back to the beginning of the current audio segment or previous one, the claimed limitation’s solution allows the program to accommodate the likely desires of the listener with a single key stroke,” and that “[t]he absence of this feature in any of [the] art demonstrates that the art did not appreciate the specific claimed skip back algorithm.” PO Resp. 34 n.6. Patent Owner (*id.*) cites to Dr. Almeroth, who testifies:

Inazawa teaches a rewind button that goes to the beginning of the current track if pressed once and goes to the beginning of the previous track if pressed again within an amount of time. However, the skip back function claimed by the ’076 . . . patent[] goes to the beginning of the previous track if the button is pressed

within a predetermined amount of time but the beginning of the current track if the button is pressed outside the predetermined amount of time.

Ex. 2016 ¶ 57.

We are persuaded by Patent Owner and Dr. Almeroth. Inazawa describes an algorithm different from that corresponding to the “means responsive to a single one of said second commands,” as construed above. According to our construction, the function of the “means responsive to a single one of said second commands” is “in response to a single ‘Back’ command, discontinuing the reproduction of the currently playing program segment and instead continuing the reproduction at the beginning of said currently playing program.” The structure corresponding to this means is a general purpose computer programmed to execute the algorithm at column 15, lines 49–59, of the ’076 patent, including:

- (1) if the currently playing program segment has played for a predetermined amount of time, resetting the playback position to the beginning of the program segment; and
- (2) playing the program segment from its beginning.

Specifically, the ’076 patent states:

Note that, after any given segment has played for a predetermined amount of time, the BACK command should reset the playback to be [the] beginning of the current segment or topic respectively, allowing the user to start the current segment or topic from the beginning unless the playback point is already near the beginning, in which case the transition is made to the prior segment. The system responds to BACK commands by resetting the playback point to the desired point in the sequence and recording the start time, volume setting and new program segment ID in the log file as indicated at 267.

Ex. 1001, 15:49–59. Thus, the '076 patent describes the pertinent algorithm as determining whether to skip to the beginning of the current segment or the beginning of the previous segment based on the amount of time that has lapsed since the beginning of the current segment. According to Petitioner, this is met by an algorithm in which a first key press is detected, a time period (t_3) expires, and a second key press is detected, after which the system resets the playback position to the beginning of the current program segment. This is shown in Figure 2A of Inazawa, as the solid line and dashed line versions of T_S .

We find that each of Inazawa's instances of T_S is a detection of a "Back" command. Thus, Inazawa skips back to the beginning of the currently playing segment either in response to a single "Back" command at the instant that command is detected (and not after a predetermined amount of time) or in response to multiple "Back" commands spaced more than t_3 apart (rather than a single "Back" command). Petitioner's argument asks us to ignore the first instance of T_S , and to consider Inazawa's algorithm to start after that and end after a second button press outside the t_3 window. That is not how Inazawa describes its algorithm. Rather, we find that Inazawa's algorithm starts at the first button press and ends after t_3 expires, after which the algorithm starts over the next time the second program selecting key is pressed. Ex. 1007, 7:21–31. Moreover, in Inazawa's algorithm, time period t_3 is not determined from the beginning of the song. Rather, it is determined from a press of a program key. As explained above, the algorithm of the "means responsive to a single one of said second commands" involves a predetermined time from the beginning of the current selection. Ex. 1001, 15:49–55. Thus, we find that the algorithm in Inazawa differs from that of

the “means responsive to a single one of said second commands” for this additional reason.

In making these findings, we considered the testimony of both Dr. Walker (Ex. 1002 ¶ 103–07) and Dr. Almeroth (Ex. 2016 ¶¶ 56–57). Both experts largely repeat the arguments from the parties’ respective papers. Nevertheless, we find that Dr. Almeroth’s opinion on the comparison of Inazawa to claim 2 is more consistent with the description in Inazawa. Therefore, we credit Dr. Almeroth’s testimony on this point.

In sum, we find that the algorithm described in Inazawa is not the same as that of the “means responsive to a single one of said second commands,” as recited in claim 2. While Petitioner asserts that aspects of the algorithm are “equivalent to the construed 112 ¶ 6 structure” of this means (Pet. 49), Petitioner offers no persuasive evidence of equivalency beyond its evidence that the structure is the same. In any case, “[a] key feature that distinguishes ‘equivalents’ under section 112, paragraph 6 and ‘equivalents’ under the doctrine of equivalents is that section 112, paragraph 6 equivalents must perform the identical function of the disclosed structure.” *Kemco*, 208 F.3d at 1364. As explained above, Petitioner has not shown that Inazawa performs the identical function of the “means responsive to a single one of said second commands,” namely “in response to a single ‘Back’ command, discontinuing the reproduction of the currently playing program segment and instead continuing the reproduction at the beginning of said currently playing program.” Accordingly, Petitioner has not shown that Chase, Loeb, and Inazawa teach “means responsive to a single one of said second commands,” as recited in claim 2.

Independent claim 14 recites, *inter alia*, “processing means responsive to a second one of said control command for discontinuing the translation of the currently playing program and instead continuing the translation at the beginning of said currently playing program.” As set forth in Section II.B.2.b above, our construction of this term is substantially the same as our construction for the “means responsive to a single one of said second commands,” as recited in claim 2. Petitioner incorporates by reference its analysis of the “means responsive to a single one of said second commands” as its analysis for the “processing means responsive to a second one of said control command for discontinuing the translation of the currently playing program and instead continuing the translation at the beginning of said currently playing program,” as recited in claim 14. Pet. 59. For the reasons given above, we find that the algorithm described in Inazawa is not the same as or the equivalent of the corresponding structure in our construction. Accordingly, Petitioner has not shown that Chase, Loeb, and Inazawa teach “processing means responsive to a second one of said control command for discontinuing the translation of the currently playing program and instead continuing the translation at the beginning of said currently playing program,” as recited in claim 14.

Claim 3 depends from claim 2. Claim 15 depends from claim 14. We have considered Petitioner’s evidence for claim 3 (Pet. 51–56) and claim 15 (*id.* at 59 (incorporating Petitioner’s analysis for claim 3)). Petitioner’s argument and evidence as to claims 3 and 15 does not remedy the deficiencies identified above for claims 2 and 14. Accordingly, we find that Chase, Loeb, and Inazawa do not teach all of the limitations of claims 3 and 15.

3. Conclusion of Obviousness

We have considered Petitioner's and Patent Owner's respective argument and evidence. We find that the combination of Chase, Loeb, and Inazawa does not teach all of the limitations of any of claims 2, 3, 14, and 15. Accordingly, Petitioner has not shown, by a preponderance of the evidence, that claims 2, 3, 14, and 15 are unpatentable as obvious over Chase, Loeb, and Inazawa.

III. CONCLUSION

Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 4 are unpatentable as obvious over Chase and Loeb. Petitioner has not demonstrated, by a preponderance of the evidence, that claims 2, 3, 14, and 15 are unpatentable as obvious over Chase, Loeb, and Inazawa.

IV. ORDER

For the reasons given, it is

ORDERED, based on a preponderance of the evidence, that claims 1 and 4 of U.S. Patent No. 6,199,076 B1 are held unpatentable;

FURTHER ORDERED that claims 2, 3, 14, and 15 of U.S. Patent No. 6,199,076 B1 are not held unpatentable; and

FURTHER ORDERED, because this is a final written decision, the parties to this proceeding seeking judicial review of our Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2015-00845
Patent 6,199,076 B1

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