

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LINKPLAY TECHNOLOGY INC.,
Petitioner,

v.

SONOS, INC.,
Patent Owner.

Case No. IPR2025-00509
U.S. Patent No. 10,853,023

PATENT OWNER SONOS, INC.'S PRELIMINARY RESPONSE

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I. INTRODUCTION

The Petition challenges the '023 Patent claims based on two references—Barbe and Richenstein—and four separate grounds. However, both references disclose devices with fundamentally different functionality than the claimed “*playback device*.”¹ As a result, the references, on their face, fall well short of disclosing each and every limitation of the challenged claims.

To start, the claimed “*playback device*” is configured to prioritize a particular type of “*media content*”—namely, “*media content*” from a line-in connected source—for playback. But neither reference discloses nor suggests this feature.

In fact, Barbe expressly distinguishes systems that prioritize media content from one particular media source over another. In this respect, as compared to the '023 Patent, Barbe proposes a fundamentally different solution that switches to “*any* [new] source that is beginning to send data”² or reverts back to the *most recent* source, without prioritizing media content from any one particular source over another.

Richenstein, meanwhile, discloses a bifurcated system composed of multiple devices with distinct roles: (1) devices on the transmitting side of Richenstein’s

¹ For clarity, claim language is presented herein in quotation marks and italics.

² Emphasis has been added unless noted otherwise.

system that function as aggregators of various “audio sources,” where multiple audio signals from the “audio sources” are combined and organized in a defined sequence (which Linkplay characterizes as prioritizing media content), and (2) devices on the receiving side of Richenstein’s system that function to select and output audio for listening (i.e., playback audio received from the transmitting side). Because of this bifurcated configuration, no single Richenstein device is capable of both prioritizing and playing back media content from any particular media source—let alone a line-in connected source.

Beyond these substantive differences, all four grounds suffer from fatal legal deficiencies that foreclose any finding of unpatentability.

First, as explained below, it is well established that anticipation cannot be based on duplicative mapping of the same prior art disclosure across multiple distinct claim limitations that intrinsic evidence confirms are separate and distinct; nor on a modified reworking of the prior art. Yet, Linkplay attempts both for Ground 1 (Barbe §102). Specifically, Linkplay improperly (1) maps the same prior art disclosure—namely, Barbe’s reference to a purported “*playback device*” that is “capable of performing automatic switching of audio sources”—on clearly distinct limitations 1.3/8.1/14.1 and 1.6/8.4/14.4, and (2) relies on a modified, hypothetical version of Barbe’s Fig. 3 in an attempt to address limitations 1.8/8.6/14.6. These legal deficiencies foreclose any finding of anticipation as a matter of law.

Second, it is well settled that, without establishing obviousness of the independent claims, any obviousness analysis of the additional limitations in the dependent claims is irrelevant. Yet, for Ground 2 (Barbe §103), Linkplay focuses solely on the additional limitations of certain dependent claims without establishing that the independent claims are obvious. This critical omission forecloses any finding of obviousness as a matter of law.

Third, as with Ground 1, Ground 3 (Richenstein §102) is legally defective for similar reasons. For one, Linkplay improperly maps the same Richenstein disclosure—namely, Richenstein’s disclosure of “automatically overrid[ing] the listener’s selection of one of the stereo channels”—on clearly distinct limitations 1.3/8.1/14.1 and 1.6/8.4/14.4. Worse yet, as detailed below, Linkplay’s anticipation theory for Richenstein impermissibly relies on a piecemeal combination of six different Richenstein devices. Linkplay does not even contend that any single Richenstein device individually discloses each and every limitation of the independent claims. These legal deficiencies foreclose any finding of anticipation as a matter of law.

Finally, Ground 4 (Richenstein §103) is legally defective as a matter of law because Linkplay’s obviousness argument for all three independent claims is limited to a single conclusory sentence addressing only the preamble of independent claim 1. Linkplay offers no explanation of how its proposed modification would work and

why a POSITA would reasonably expect success in doing so. Specifically, with respect to the preamble of independent claim 1, Linkplay merely asserts that, “[t]o the extent a built-in or an external speaker is not disclosed, a POSITA would find it obvious to include such a speaker in audio device 34 and/or computer 1142 to produce sound locally, thereby enhancing their usability.” Pet., 45. The Petition is otherwise devoid of any obviousness argument addressing limitations 1.1-1.8. Linkplay then refers back to independent claim 1 for the remaining independent claims. As detailed below, this single conclusory sentence in the preamble falls well short of establishing a *prima facie* showing of obviousness as a matter of law.

At bottom, the Petition does not demonstrate a reasonable likelihood of success on any claim of the ’023 Patent and should therefore be denied.

II. OVERVIEW OF THE ’023 PATENT

A. Overview of the Technology

The ’023 Patent stems from a non-provisional patent filing on April 18, 2011. *See* Ex.1001, code (63). The ’023 Patent recognized problems with existing technology for switching between sources of media content; existing multi-source media systems at the time of the inventions of the ’023 Patent lacked intelligent source-switching capabilities and as a result, were cumbersome to use from a user’s perspective. *See, e.g.*, Ex.1001, 2:37-56, 6:41-50, 7:13-29.

Existing audio systems were reliant on a user to perform specific sequences of operations in order for such systems to switch from playing one media source to another. *See, e.g., id.* For example, in order for an existing audio system to switch from playing audio from a first media source to playing audio from a second media source connected to the audio system by a line-in connector, a user would first ensure that the second media source is playing audio—by instructing the second media source to begin playing audio—and then instruct the audio system to switch its input to the second media source. *See, e.g., id.* As another example, in order for an existing audio system to then switch from playing audio from the second media source provided through the line-in connector to another media source, a user would first ensure that the second media source is no longer playing audio—by instructing the second media source to stop providing the audio system with audio through the line-in connector. *See, e.g., id., 2:62-3:6, 7:25-29.*

To address these and other limitations of existing audio systems, the '023 Patent introduced a solution for multi-source “playback devices” to intelligently switch between media sources based on specifically defined criteria. *See, e.g., id., 2:42-56, 6:41-53, 7:13-24.* For instance, '023 Patent discloses a “playback device” that may comprise one or more media sources. *See id., 3:8-9* (“The playback device and any of the first source and second source may be components of a single apparatus”); *see also, e.g., id., 3:30-32, 6:56-58, 23:32-35.* According to the

'023 Patent this disclosed “playback device” may be configured to intelligently switch between media sources based on a determination of receipt of media content from a line-in connected source. *See, e.g., id.*, 2:42-56, 6:41-53, 7:13-24. In this way, the '023 Patent introduced a solution that transformed how multi-source media systems of the time handled source switching.

Indeed, rather than requiring a user to perform specific sequences of operations to switch between media sources for playback, the claimed “*playback device*” is equipped with technological capabilities to intelligently switch from playing media from a different source (e.g., an Internet music service) to playing media from a line-in connected source. *See, e.g., id.*

As one example, the '023 Patent discloses a specific implementation where the disclosed “playback device” (also referred to as a “zone player”)—which includes a line-in connector—is configured to prioritize a line-in connected source over a different media source for playback:

A listener may command the audio device to play audio (e.g., without having to manually switch sources on the zone player). For example, if the audio device is an AirPort Express, a listener may use an AirPort-enabled computer or smart phone with an iTunes music player, for example, to command the audio device to play. ***The second source is configured, such that when a signal is detected on the line-in connector, the second source automatically switches the zone player to play audio from the audio device via the second audio data stream.***

At some later point in time, with the audio device connected to the second source via its line-in connector still playing, the listener may decide to play a new audio data stream from a different source and responsively input a command that is communicated to the zone player to play the new audio data stream. The zone player receives the command and switches to the listener's desired source and the new audio data stream is played. The zone player subsequently instructs the second source having the line-in connector to stop sending its audio data stream to the zone player. At this point, the second source waits until it no longer detects a signal on its line-in connector for an interval of time. An example interval of time is 13 seconds or less, though any programmed time can work. *The second source is now armed (or rearmed) and once again ready to automatically switch the playback on the zone player to the audio data stream from the second source, should the second source once again detect a signal on its line-in connector from the audio device.*

Id., 6:41-7:12; see also, e.g., *id.*, 23:61-24:35.

In accordance with this disclosure, the claimed “*playback device*” includes a “*line-in connector*” and is configured to prioritize a “*first type of media content*” received via the “*line-in connector*” over a “*second type of media content*” for playback:

- [1.3] [8.1] [14.1] *arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content*

- [1.5][8.3][14.3] *while playing the second type of media content, determining that the playback device is **receiving the first type of media content via a line-in connector**;*
- [1.6][8.4][14.4] *in response to determining that playback device is receiving the first type of media content [via the line-in connector], ceasing playback of the second type of media content and **playing the first type of media content [via the line-in connector]**;*
- [1.8][8.6][14.6] *in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and rearming the playback device so that **subsequent receipt of the first type of media content [via the line-in connector] preempts playback of the second type of media content.***

Id., Claims 1, 8, 14.

In this way, the claimed “*playback device*” is configured to, *inter alia*, “*arm[]*” itself and “*rearm*” itself, where, in both instances, “*the first type of media content preempts playback of the second type of media content.*” The claimed “*playback device*” is further configured to “*receiv[e] the first type of media content via a **line-in connector.***” In this way, the claimed “*playback device*” is configured to prioritize “*media content*” from a line-in connected source over another source for playback.

B. Level of Skill of a POSITA

Linkplay contends a “[POSITA] at the time of the claimed invention would have had a Bachelor’s degree in electrical engineering, computer engineering, computer science, information technology, or a related field, along with at least two years of experience in the design or development of connected consumer electronics, networked engineering, or the equivalent.” Pet., 7. Sonos disagrees at least because it is unclear what Linkplay means by a degree in “information technology” and the phrase “connected consumer electronics” (e.g., if this phrase intends to cover non-networked consumer electronics).

Instead, a POSITA would have had a Bachelor’s degree in computer science, computer engineering, electrical engineering, or an equivalent thereof, and 2-4 years of professional experience in the fields of networking and network-based systems or applications, such as consumer audio systems, or an equivalent level of skill, knowledge, and experience. Regardless, the Petition fails under both Sonos’s and Linkplay’s definition of a POSITA.

III. OVERVIEW OF THE PETITION’S FLAWS

As shown below, the Petition challenges the ’023 Patent claims based on two references and four grounds.

Name	Ex.	Publication No.	Filed	Published	Prior art under at least
Barbe ¹	1005	US2010/0325323	9/2/2010 ²	12/23/2010	§ 102(a)
Richenstein	1004	US2004/0157555	10/22/2003	8/12/2004	§§ 102(a), (b), (e)

Ground	Claims	Basis	References
1	1-17	§ 102	Barbe (EX1005)
2	3-6, 10-12, 16-17	§ 103	Barbe (EX1005)
3	1-17	§ 102	Richenstein (EX1004)
4	1-17	§ 103	Richenstein (EX1004)

Pet., 3.

Specifically, Grounds 1 and 3 allege that each of Linkplay’s primary references—Barbe (Ex.1005) and Richenstein (Ex.1004), respectively—anticipates every claim of the ’023 Patent, Ground 2 alleges that Barbe alone renders obvious dependent claims 3-6, 10-12, and 16-17, and Ground 4 alleges that Richenstein alone renders obvious every claim of the ’023 Patent. None of these Grounds, however, meet the reasonable likelihood standard as a matter of law.

Indeed, Grounds 1 and 3 are characterized as “anticipation” grounds solely by Linkplay’s own labeling. Neither Barbe nor Richenstein could objectively be viewed as disclosing each and every element of the challenged claims, let alone disclosing each and every element arranged in the specific manner recited in the challenged claims. As such, Ground 1 and 3 are each legally insufficient to support an anticipation theory and must be rejected. *See, e.g., Finisar Corp. v. DirecTV Grp., Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008) (“[D]isclosure of each element is

not quite enough—this court has long held that anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention *arranged as in the claim.*”) (cleaned up; emphasis original); *see also Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (an “anticipatory reference” must “show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order.”).

For instance, as explained below, Linkplay attempts to map the same Barbe disclosure—namely, Barbe’s disclosure of a purported “*playback device*” that is “capable of performing automatic switching of audio sources”—on clearly distinct limitations 1.3/8.1/14.1 and 1.6/8.4/14.4. Similarly, Linkplay attempts to map the same Richenstein disclosure—namely, Richenstein’s disclosure of “automatically overrid[ing] the listener’s selection of one of the stereo channels”—on clearly distinct limitations 1.3/8.1/14.1 and 1.6/8.4/14.4. However, it is improper to map the same prior art disclosure to satisfy multiple, distinct claim limitations that intrinsic evidence confirms are separate and distinct. *See, e.g., Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (*quoting Gaus v. Conair Corp.*, 363 F.3d 1284, 1288 (Fed. Cir. 2004)) (“Where a claim lists elements separately, ‘the clear implication of the claim language’ is that those elements are ‘distinct component[s]’ of the patented invention.”); *Comcast Cable Comm’ns., LLC v. Promptu Sys. Corp.*, 838 F. App’x 551, 553-554 (Fed. Cir. 2021)

(affirming Board's determination that a petitioner failed to demonstrate unpatentability because it mapped two distinct limitations to the same element in the prior art). Because Linkplay relies on the same prior art disclosure for two clearly separate and distinct claim limitations, Grounds 1 and 3 fail to meet the reasonable likelihood standard as a matter of law.

Moreover, as explained below, Linkplay advances an anticipation theory for Ground 1 by constructing a modified, hypothetical version of Barbe's Fig. 3 in an attempt to address limitations 1.8/8.6/14.6. It is well established, however, that "[p]rior art that must be modified to meet the disputed claim limitation does not anticipate the claim." *Enplas Display Device Corp. v. Seoul Semiconductor Co., Ltd.*, 909 F.3d 398, 405 (Fed. Cir. 2018); *see also, e.g., In re Chudik*, 851 F.3d 1365, 1374 (Fed. Cir. 2017) (reversing the Board's anticipation rejection during examination and concluding that the references do not disclose the relevant limitations without modification to the prior art figures). As such, Ground 1 also fails to meet the reasonable likelihood standard as a matter of law for this independent reason.

Further, as explained below, Linkplay's anticipation theory for Ground 3 is legally deficient as a matter of law for an additional independent reason: it relies on a fragmented combination of six different Richenstein devices. Yet, not a single Richenstein device, on its own, discloses every limitation of the independent claims.

This deficiency is dispositive of Ground 3 as a matter of law. *C.f. Crown Operations Int'l, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375 (Fed. Cir. 2002) (“A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference.”).

Despite the legal deficiencies for Grounds 1 and 3, Linkplay makes no effort to remedy them in its obviousness Grounds 2 and 4. Critically, for Ground 2, Linkplay does not contend that Barbe alone renders any limitation of the independent claims obvious. This failure is dispositive of Ground 2, as the foregoing deficiencies with the independent claims remain unresolved. *See In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) (“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious”). For Ground 4, Linkplay offers a single conclusory sentence addressing only the preamble of independent claim 1. The Petition is otherwise devoid of any obviousness argument addressing limitations 1.1-1.8. As detailed below, this single conclusory sentence falls well short of establishing a *prima facie* showing of obviousness as a matter of law.

In sum, all four grounds are legally deficient as a matter of law, and the Board should therefore deny institution of this IPR.

IV. THE BARBE GROUNDS (GROUNDS 1& 2)

For the Barbe grounds, focusing just on the independent claims of the '023, the Petition fails to show a reasonable likelihood of prevailing on at least limitations

1.3/8.1/14.1 and 1.8/8.6/14.6, each of which independently warrants denial of institution on the Barbe grounds. Below, as in the Petition (*see* Pet., 34, 37), Sonos will discuss Barbe’s deficiencies with respect to these limitations using independent claim 1 as being representative.

A. Overview of Barbe

Barbe was filed on September 2, 2010 and is the U.S. national stage entry of International App. No. PCT/FR2008/001206, which was filed on August 26, 2008, and published on May 14, 2009. Pet., 3 n.1.

Barbe generally “relates to a method and a device for automatically managing and selecting digital and/or analog sources available at the input of an audio or an audio/video system,” referred to as a “multimedia system.” Ex.1005, ¶1. More specifically, Barbe describes problems with other multimedia systems that “manag[e] conflict between a plurality of concurrent sources that are active simultaneously.” *Id.*, ¶5. Barbe expressly disapproves of prior art multimedia systems that manage sources using a “static priority order,” such as a “Bluetooth audio source” being prioritized over an “audio source connected to [a] ‘line’ input”:

WO 2007/074245 A (Seydoux) describes one such type of multimedia system suitable for being connected to a variety of sources via wires (connections) or via wireless coupling.

In that known device, the sources are managed using a *static priority order, the Bluetooth audio source having higher priority than the audio source connected to the “line” input*. If the system reads an

audio stream S coming from the Bluetooth source, then rendering of the audio signal applied to the “line” input will be inhibited so long as the Bluetooth stream is not interrupted. Furthermore, if the system is reading a signal coming from a source connected to the “line” input, that source will always be interrupted.

Id., ¶11-12.

To differentiate from prior art multimedia systems that managed sources using a “static priority order,” “the *object* of [Barbe’s] *invention* is to propose an automatic switching technique that is ‘intelligent’ for selecting from amongst the various sources that are simultaneously active and connected to a multimedia device, with this taking place without any explicit instruction from the user, and *without* making use of some frozen *priority* that is a function of a hierarchy specific to the various sources.” *Id.*, ¶14; *see also id.*, ¶13. In this regard, Barbe proposes a fundamentally different solution that does not prioritize any particular source over another but instead switches to “*any* [new] source that is beginning to send data” or reverts back to the *most recent* source when the “new source is deactivated”:

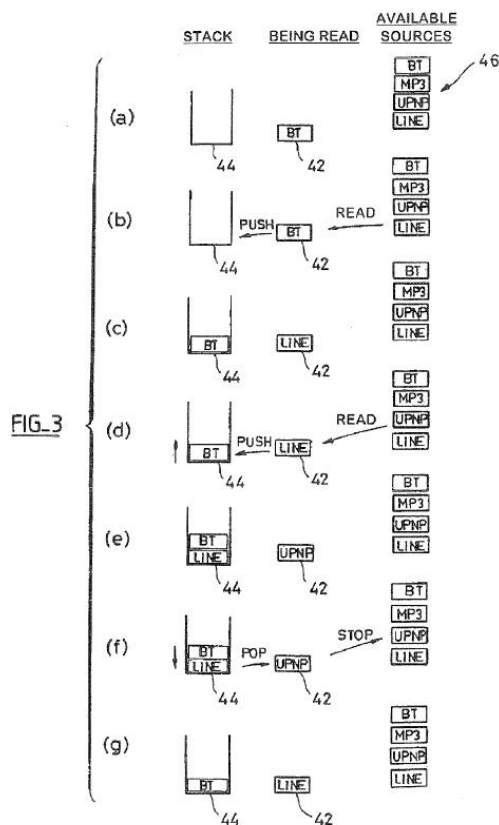
At any given instant, the highest priority is that given to *any source* that is beginning to send data ..., with this implicitly being representative of an intention of the user who has switched on an appliance, directed an audio stream from an MP3 player to the system, etc. The other active sources are then interrupted. The *most recently interrupted current source* is paused, where possible, and its identifier is conserved in memory so as to enable reading thereof to *resume as soon as the new*

source is deactivated, and still without requiring any specific intervention on the part of the user.

Id., ¶18; *see also id.*, ¶50 (“[T]he invention is applicable independently of the type of source.”).

To illustrate, Fig. 3 below provides an example of Barbe’s solution involving “four potentially available sources, namely a Bluetooth source (BT), an MP3 player, a digital source using a UPnP protocol, and a source connected to the ‘line’ input.”

Id., ¶49.



Id., Fig. 3.

As shown, there are two ways in which Barbe’s solution switches its media source. **First**, each time a new source is detected, the new source is read for playback, and the current source is “paused” and “pushed into the stack 44.” *Id.*, ¶52-55. For example, at step (b), “the concentrator detects that the source on the ‘line’ input has been activated” for playback and “[w]hen this detection occurs, the Bluetooth source is paused ..., and the identifier of the paused Bluetooth source is pushed into the stack 44,” which is shown in step (c). *Id.*, ¶52-53. As further shown in step (c), media content from the “line” input source is being read for playback. As another example, at step (d), the concentrator detects that the “UPnP” source has been activated for playback, and when this detection occurs, the “line” input source is paused, and the identifier of the paused “line” input source is pushed into the stack 44, which is shown in step (e). *Id.*, ¶54-55. As further shown in step (e), , media content from the “UPnP” source is being read for playback.

Second, as further shown, each time a current source in “register 42” is stopped, “register 42 is then replaced by the identifier that was last pushed into the stack 44 (the stack is of the ‘last-in first-out’ (LIFO) type, and this identifier is popped from the stack.” *Id.*, ¶56-58. For example, at step (f), the “UPnP” source has just been stopped, and as a result, “[t]he content of register 42 is then replaced by the identifier that was last pushed into the stack 44” (i.e., the “line” input source),

which is shown in step (g). *Id.* As further shown in step (g), media content from the “line” input source is being read again for playback.

B. Barbe’s Disclosed System Is Fundamentally Different Than the Claimed “*Playback Device*”

Linkplay’s assertion that Barbe anticipates each claim of the ’023 Patent (Ground 1) falls flat for several clear reasons. Above all, Linkplay *concedes* that Barbe’s disclosed system is fundamentally different than the claimed “*playback device*.”

Specifically, the claimed “*playback device*” is configured to prioritize media content from a specific media source—namely, a line-in connected source—for playback. *Supra* §II.A. In fact, by Linkplay’s own characterization, “the challenged claims recite automatically switching to a *priority input* when that priority input is detected.” Pet., 1.

In direct contrast, Barbe expressly distinguishes multimedia systems that prioritize a specific media source over another, such as a multimedia system that prioritizes a “Bluetooth audio source” over an “audio source connected to [a] ‘line’ input.” Ex.1005, ¶11-13. Unlike multimedia systems that managed sources using such a “static priority order,” Barbe proposes a solution that switches to “*any* [new] source that is beginning to send data” or reverts back to the *most recent* source without prioritizing one particular source over another. *Id.*, ¶18. Linkplay’s expert—Dr. Hartpence—acknowledged this fundamental difference:

Barbe's solution is to "propose an automatic switching technique that is 'intelligent' for selecting from amongst various sources that are simultaneously active ... with this taking place without any explicit instruction from the user, and **without** making use of some frozen **priority** that is a function of a hierarchy specific to the various sources." Barbe, [0014]. Barbe accomplishes this by simply giving the highest priority to "**any** source that is beginning to send data ..., with this implicitly being representative of an intention of the user who has switched on an appliance." Barbe, [0018]. Barbe's method will then interrupt or mute the other active sources, and begin playing audio from the newly activated source. Barbe, [0018].

Ex.1003, ¶49.

Because of this fundamental difference between the claimed "*playback device*" and Barbe's disclosed system, Barbe (Ground 1) does **not** anticipate at least the following limitations recited in independent claim 1, where "*the first type of media content*" received via a "*line-in connector*" (see limitation 1.5) is prioritized over "*the second type of media content*":

- Limitation 1.3: ***arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content***
- Limitation 1.8: *in response to determining that the playback device is no longer receiving the first type of media content, ceasing playback of the first type of media content and **rearming** the playback device so that **subsequent receipt of the first type of media***

content [via the line-in connector] preempts playback of the second type of media content.

Barbe's shortcomings as to the foregoing limitations are addressed in more detail below.

C. Barbe Does Not Disclose Limitation 1.3

As set forth above, limitation 1.3 recites that the claimed "playback device" is configured to "*arm[] the playback device so that receipt of a first type of media content **preempts** playback of a second type of media content.*" Limitation 1.5 further recites that the "*first type of media content*" is received via a "*line-in connector*" of the claimed "*playback device.*"

In this way, the claimed "*playback device*" is configured to "*arm[]*" itself to prioritize "*media content*" from a particular source—i.e., a line-in connected source—over "*media content*" from another source.

Barbe's purported "*playback device,*" however, is not configured to "*arm[]*" itself to prioritize "*media content*" from any particular source—let alone a line-in connected source. As previously discussed—and as Dr. Hartpence concedes—Barbe's purported "*playback device*" switches to "***any*** [new] source that is beginning to send data" without prioritizing any particular source, much less a line-in connected source. *Supra* §IV.B; *see also* Ex.1005, ¶50 ("[T]he invention is applicable independently of the type of source.").

Thus, Barbe fails to disclose limitation 1.3.

1. Linkplay Improperly Maps the Same Barbe Disclosure to Limitations 1.3 and 1.6

As previously discussed, it is legally improper to rely on the same prior art disclosure to satisfy multiple, distinct claim limitations that intrinsic evidence confirms are separate and distinct. *Supra* §III (citing cases). Yet, that is precisely what Linkplay does in its Petition.

Specifically, independent claim 1 recites two clearly separate and distinct limitations 1.3 and 1.6. While limitation 1.3 requires the claimed “*playback device*” to be configured to “*arm[]*” itself to prioritize a line-in connected source over another source, limitation 1.6 requires the claimed “*playback device*” to be configured to, “*in response to determining that playback device is receiving the first type of media content [via the line-in connector], ceasing playback of the second type of media content and playing the first type of media content [via the line-in connector].*” Thus, limitations 1.3 and 1.6 are separate and distinct limitations—each imposing different functional requirements on the claimed “*playback device.*”

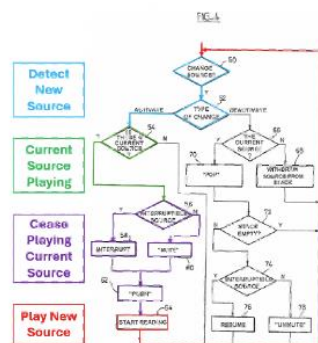
However, because Barbe does not disclose a “*playback device*” that is configured to “*arm[]*” itself to prioritize any particular source, let alone a line-in connected source, Linkplay attempts to satisfy this requirement by mapping the same Barbe disclosure—namely, Barbe’s disclosure of a purported “*playback device*” that is “capable of performing automatic switching of audio sources”—to both limitations 1.3 and 1.6. *Compare* Pet., 15-18 with 22-24.

To unpack this further, for limitation 1.3, Linkplay contends that Barbe satisfies limitation 1.3’s *arming* requirement because Barbe discloses a purported “*playback device*” that is “capable of performing automatic switching of audio sources,” where “a newly activated source” “overrides or automatically switches” “a currently playing source.” *Id.*, 15. But, Linkplay relies on that same Barbe disclosure in an attempt to address limitation 1.6’s intelligent switching requirement (i.e., responsively “*ceasing playback of the second type of media content and playing the first type of media content [via the line-in connector]*”).

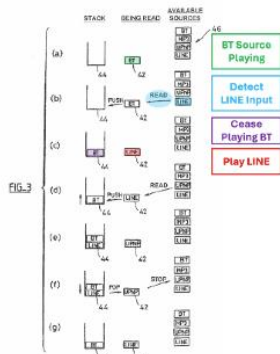
In particular, for limitation 1.6, Linkplay contends that “Barbe discloses that, in response to detecting the activation of a new source and arrival of a new audio stream from the new source, the current source is interrupted or muted ... and the newly activated source is played.” *Id.*, 23. In other words, Linkplay contends that limitation 1.6 is satisfied by the same functionality of Barbe’s purported “*playback device*” that Linkplay relies on for limitation 1.3.

Linkplay’s duplicative mapping of the same Barbe disclosure on clearly distinct limitations 1.3 and 1.6 is readily apparent in its Petition, which cites, annotates, and describes the same figures (shown below) for both limitations.

Limitation 1.3 (see Pet., 16-18)

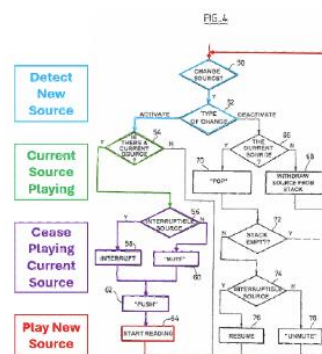


Barbe, Fig. 4 (annotated); EX1003, ¶¶71-73.

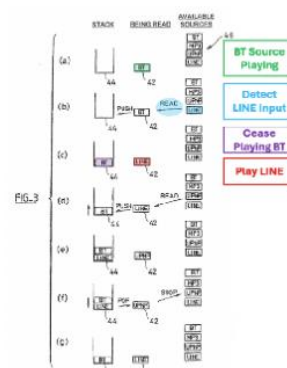


Barbe, Fig. 3 (annotated); see also EX1003, ¶74.

Limitation 1.6 (see Pet., 22-24)



Barbe, Fig. 4 (annotated); EX1003, ¶87.



Barbe, Fig. 3 (annotated); see also EX1003, ¶¶88-89.

Id., Pet., 16-18, 22-24 (annotations in original).

In sum, Linkplay maps the same functionality of Barbe’s purported “*playback device*” on two limitations that intrinsic evidence establishes are drawn to separate and distinct functionality. This is improper.

In fact, the Board has **repeatedly** denied institution when a petition ground maps the same prior art disclosure to multiple separate and distinct claim limitations. See, e.g., *Volkswagen Grp. of Am., Inc. v. Stratosaudio, Inc.*, IPR2021-00719, Paper 16, 16-18 (PTAB Oct. 22, 2021), *Lego Sys., Inc. v. MQ Gaming LLC*, IPR2020-01446, Paper 14 at 12-14 (PTAB Feb. 16, 2021); *LG Elects., Inc. and Hisense Co.*,

Ltd. v. Polaris Powered Techs., LLC, IPR2020-01337, Paper 11 at 18 (PTAB Mar. 9, 2021); *Cisco Sys., Inc. v. Egenera, Inc.*, IPR2017-01341, Paper 10 at 14-15 (PTAB Nov. 13, 2017); *Hopkins Mfg. Corp. v. Cequent Performance Prods., Inc.*, IPR2015-00613, Paper 9 at 12 (PTAB Aug. 7, 2015) (all denying institution when the petition mapped a single element or teaching in the prior art to at least two separate and distinct claim elements).

The Board should likewise deny institution of this Petition on this basis.

D. Barbe Does Not Disclose Limitation 1.8

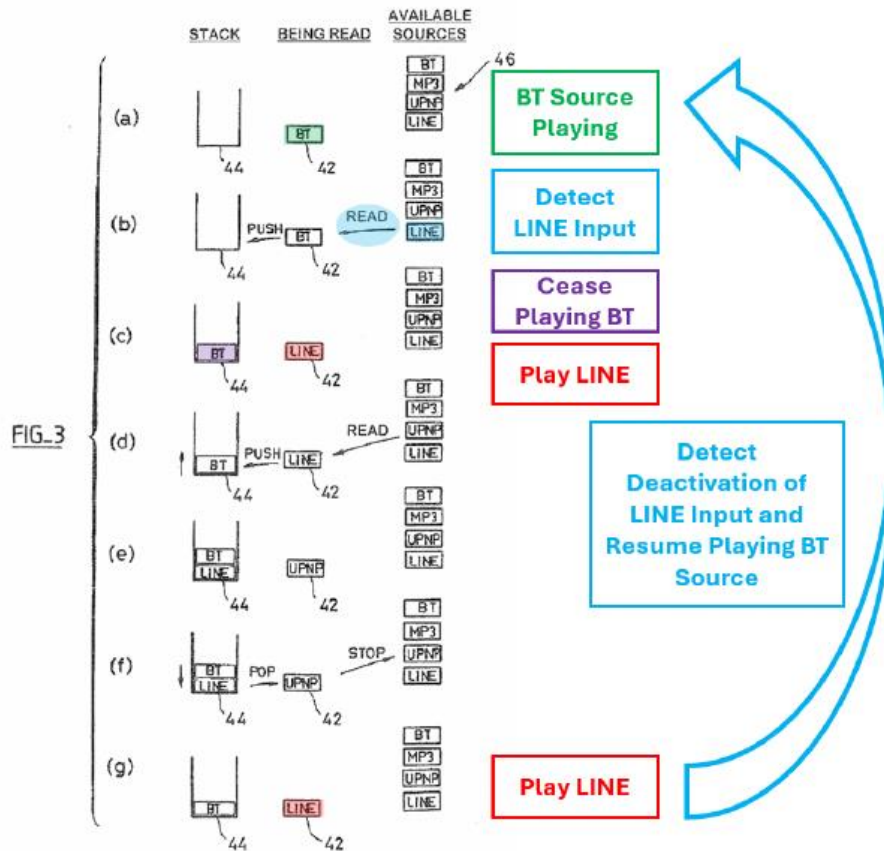
As set forth above, limitation 1.8 recites that the claimed “*playback device*” is configured to, “*in response to determining that the playback device is no longer receiving the first type of media content, ceas[e] playback of the first type of media content and rearm[] the playback device so that subsequent receipt of the first type of media content [via the line-in connector] preempts playback of the second type of media content.*” In this regard, the claimed “*playback device*” is configured to, *inter alia*, “*rearm[]*” itself to prioritize “*media content*” from a line-in connected source over another source.

As previously discussed, however, Barbe’s purported “*playback device*,” does not “*rearm[]*” itself—much less “*arm[]*” itself as discussed above—to prioritize “*media content*” from a line-in connected source over another source. *Supra* §IV.A-B. Thus, Barbe fails to disclose limitation 1.8.

1. Linkplay’s Hypothetical Reworking of Barbe’s Figure 3 Does Not Anticipate Limitation 1.8

As previously discussed, it is well recognized that “[p]rior art that must be modified to meet the disputed claim limitation does not anticipate the claim.” *Enplas Display Device Corp.*, 909 F.3d at 405; *see also, e.g., In re Chudik*, 851 F.3d at 1374. Linkplay’s anticipation theory, however, hinges precisely on a modification of Barbe’s disclosure and therefore fails as a matter of law.

Barbe does not disclose a “*playback device*” that is configured to “*rearm []*” itself to prioritize “*media content*” from a line-in connected source over another source. So, Linkplay attempts to concoct an anticipation theory where Barbe’s system switches back to playing from the “line” input source again. Linkplay does so by constructing a modified, hypothetical version of Barbe’s Fig. 3, where Linkplay envisions a process that loops from step (g) back to step (a), and then repeats steps (b) and (c):



Pet., 28 (annotations added by Linkplay), *see also id* (“This will circle the process in Fig. 3 from step (g) back to step (a).”). Tellingly, Linkplay expressly *concedes* that Fig. 3 is “*modified*.” *Id* (“Barbe, Fig. 3 (modified)”).

To be clear, Barbe does not disclose a process that loops from step (g) back to step (a), and then repeats steps (b) and (c). With respect to “step (g),” Barbe only discloses that “step (g) [] is identical to step (c), i.e., playback is restored of [sic] the data a stream being applied to the ‘line’ input, with the Bluetooth source remaining on standby and ready to be reactivated when the ‘line’ source is stopped.” Ex.1005, ¶58. Linkplay’s hypothetical loop that goes “from step (g) back to step (a)” (Pet., 28) finds no support in Barbe.

Thus, Linkplay’s anticipation theory is defective as a matter of law. *See, e.g., Delphi Techs., Inc. v. Microchip Tech. Inc.*, IPR2017-00970, 2017 WL 4082462, at *12 (PTAB Sept. 13, 2017) (finding Petitioner’s construction of a “modified, hypothetical version of [the prior art]’s Figure 1” amounts to “speculation [and] is not the standard for anticipation.”); *Xilinx, Inc. v. Polaris Innovations Ltd.*, IPR2023-00516, 2023 WL 6061393, at *11 (PTAB Sept. 15, 2023) (finding Petitioner failed to demonstrate reasonable likelihood of prevailing in its anticipation theory because “Petitioner relies on a modified Figure 3” of the prior art); *Ex Parte Depue et al.*, Appeal No. 2017-004747, 2018 WL 799076, at *2 (PTAB Jan. 30, 2018) (finding Examiner’s reasoning based on “a proposed modification of Figure 5” of the prior art “is better suited [for an] obviousness analysis and not anticipation.”).

Moreover, even if the Board were to entertain Linkplay’s hypothetical reworking of Barbe’s Fig. 3, it still fails to disclose limitation 1.8. For instance, even if “the process in Fig. 3 [were to go] from step (g) back to step (a),” Barbe discloses that whenever **any** new source is detected—regardless of whether it is a line-in connected source—the current source is “paused” and the new source is activated for playback. Ex.1005, ¶52-55; *see also, e.g., id.*, ¶18 (“At any given instant, the highest priority is that given to **any** source that is beginning to send data ...”), ¶50 (“[T]he invention is applicable **independently** of the type of source.”), ¶14 (“In general, the object of the invention is to propose an automatic switching technique

... *without* making use of some frozen *priority* that is a function of a hierarchy specific to the various sources.”).

Accordingly, Barbe’s purported “*playback device*” is not configured to “*rearm[]*” itself to prioritize “*media content*” from a line-in connected source over “*media content*” from another source, and Linkplay fails to explain how Barbe’s purported “*playback device*”—which automatically switches to *any* new source for playback *without* prioritizing a particular source, let alone a line-in connected source—satisfies the “*rearming*” requirement of limitation 1.8.

Thus, Linkplay has failed to demonstrate a reasonable likelihood of success on Ground 1.

E. Barbe (Ground 2) Does Not Render Obvious Dependent Claims 3-6, 10-12, 16-17

Despite Barbe’s clear deficiencies as a purported anticipatory reference, Linkplay makes no effort to address them in Ground 2. In fact, Linkplay does not assert that Barbe alone renders any limitation of the independent claims obvious. *See* Pet., 14-28, 34-35, 37-38. This omission is fatal to Ground 2, which only addresses the *additional* limitations of dependent claims 3-6, 10-12, and 16-17, without establishing obviousness of the underlying independent claims. *See In re Fritch*, 972 F.2d at 1266 (“[D]ependent claims are nonobvious if the independent claims from which they depend are nonobvious”). Thus, Linkplay has failed to demonstrate a reasonable likelihood of success on Ground 2.

V. THE RICHENSTEIN GROUNDS (GROUNDS 3 & 4)

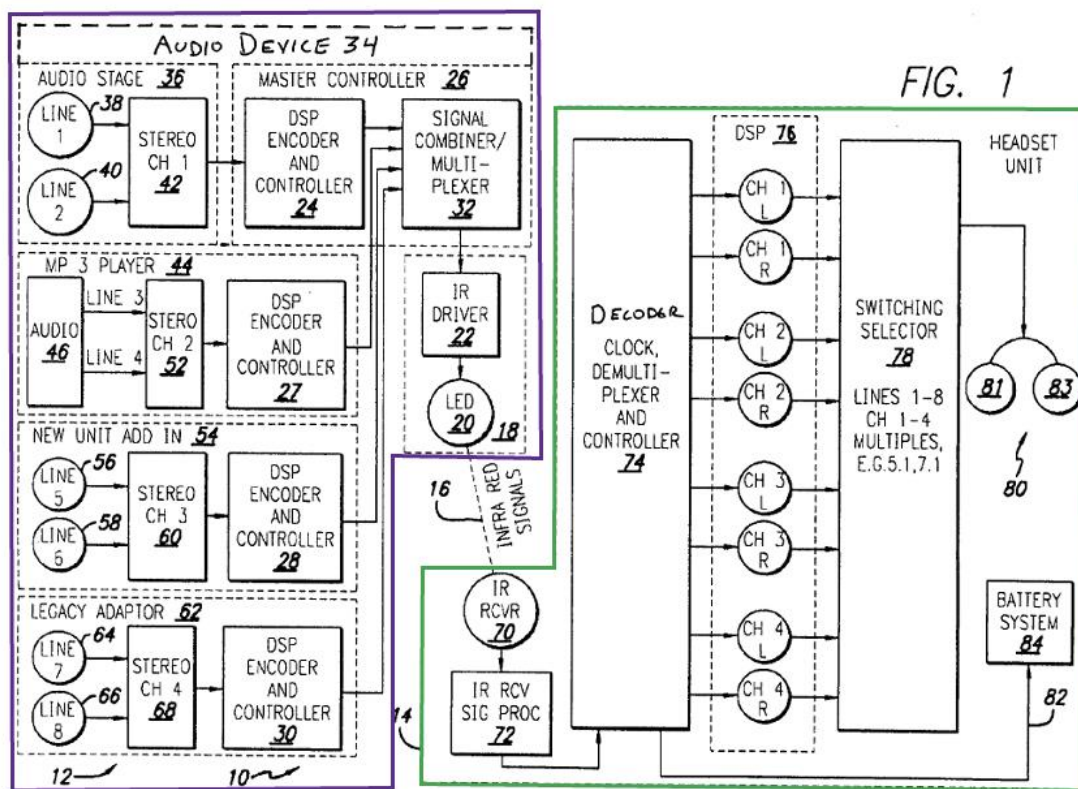
For the Richenstein grounds, focusing just on the independent claims of the '023 Patent, the Petition fails to show a reasonable likelihood of success on at least limitations 1.3-1.8, 8.1-8.6, and 14.1-14.6, each of which independently warrants denial of institution on the Richenstein grounds. Below, as in the Petition (*see* Pet., 67-69), Sonos will discuss Richenstein's deficiencies with respect to these limitations using independent claim 1 as being representative.

A. Overview of Richenstein

Richenstein generally relates to “wireless audio and video systems for providing a plurality of selectable audio-video signals from one or more sources to one or more listeners in an automobile, airplane, or building.” Ex.1004, ¶2. More specifically, Richenstein describes a problem with existing “wireless audio systems” that include “an audio source such as a tuner transmitting a signal to one or more wireless headphones”—namely, that the transmitted “signal carries a single stereo channel of audio data” and “[t]o select a different channel of audio data, someone must operate the tuner to transmit the newly desired channel, at which point all wireless headphones receiving the signal will begin reproducing the new channel.” *Id.*, ¶3. Richenstein seeks to solve this problem and explains, “[w]hat is needed is an improved wireless communication system including one or more wireless reception devices such as headphones, wherein the system offers multiple channels

of audio and video signals, and other data, for individual selection therebetween by each respective reception device.” *Id.*, ¶16.

To this end, as reproduced below, Richenstein discloses a “wireless headphone system 10” comprising (1) a “transmitter subsystem 12” (annotated in purple) with a “master controller 26” that may be included in an “audio device 34” and (2) a “headset unit 14” (also referred to as “headset receiver units 14”) (annotated in green), which collectively can “serve as a base or entry level system suitable for use as a single channel wireless headphone system....” *Id.*, ¶36.



Id., FIG. 1 (annotations added).

In this regard, Richenstein describes two types of devices: (1) those on the transmitting side that transmit audio data to another device, and (2) those on the receiving side that receive audio data from another device. *See id.*

In particular, Richenstein describes “audio device 34” as a centralized aggregator of various “audio sources” from which audio signals can be transmitted to a reception device, such as “headset unit 14.” *Id.*, ¶¶33-40, FIG.1. In this respect, Richenstein explains that “audio device 34... represents any audio source,” such as radios, CD players, cassette players, and min-disc players, and “the audio portions of electronic devices” that themselves provide other types of audio signals, such as computers, TV sets, and DVD players. *Id.*, ¶36.

Multiple audio signals from the audio sources connected to “audio device 34” may be combined by “signal combiner/multiplexer 32” and then transmitted by an “[infrared] IR transmitter 20” via IR signals to “headset unit 14.” *Id.*, ¶¶34-37. According to Richenstein, a transmitted IR signal may be “partitioned into two sections, header section 87 and data section 88,” where “data section 88” may include a “known order of the samples” of “each of the 8 audio data streams” of the audio sources. *Id.*, ¶¶57-58, FIG.1. A “decoder 74” of the “headset unit 14” processes the received IR signals to obtain separate stereo channels of audio, one pair of which can be selected by the user for output by “headset unit 14” for listening. *Id.*, ¶¶42-45.

In line with this discussion, referring to FIG. 26 below, Richenstein discloses “communication system 1140” that “provides computer generated audio output from computer 1142 to a listener who may selectably use speakers 1144 and 1146 or headphones 14.” *Id.*, ¶188. In this regard, “computer 1142” is on the transmitting side and the “speakers 1144 and 1146 or headphones 14” are on the receiving side. According to Richenstein, “signal input connector 1150 may serve to apply priority signals to computer 1142, such as indications of a landline, cellphone or doorbell ringing or a driveway or yard sensor output, that may be applied to serially coded digital bitstream 16 for reproduction on headphones 14 and/or computer speakers 1144, 1146.”

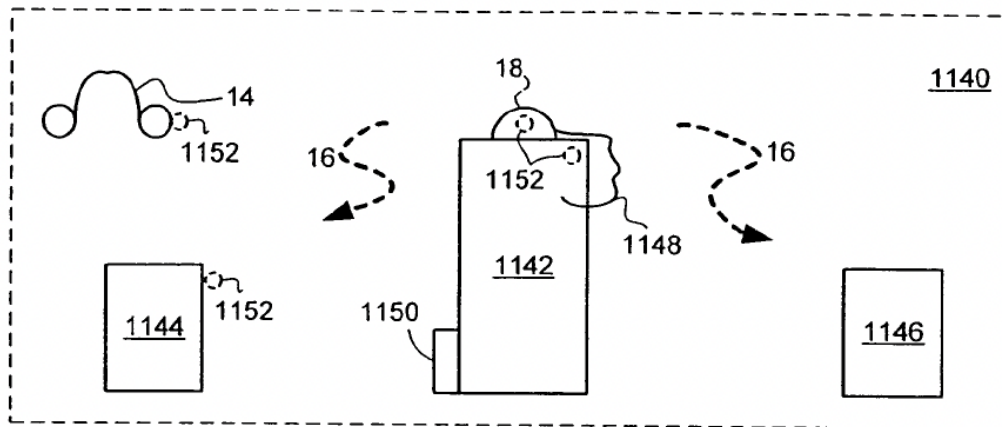


Fig. 26

Along similar lines, referring to FIG. 27 below, Richenstein discloses “communication system 1154” which “may be a bidirectional data system in which digital bitstream 17 from portable MP3 player 45 is received by the combined

transmitter/receiver 19 which also transmits bitstream 16 to headphones 14.” In turn, Richenstein discloses that “[b]itstream 17 may then be applied to audio device 34 and used to provide one or more audio channels in bitstream 16 selectable for reception by headphones 14 or suitable speakers.”

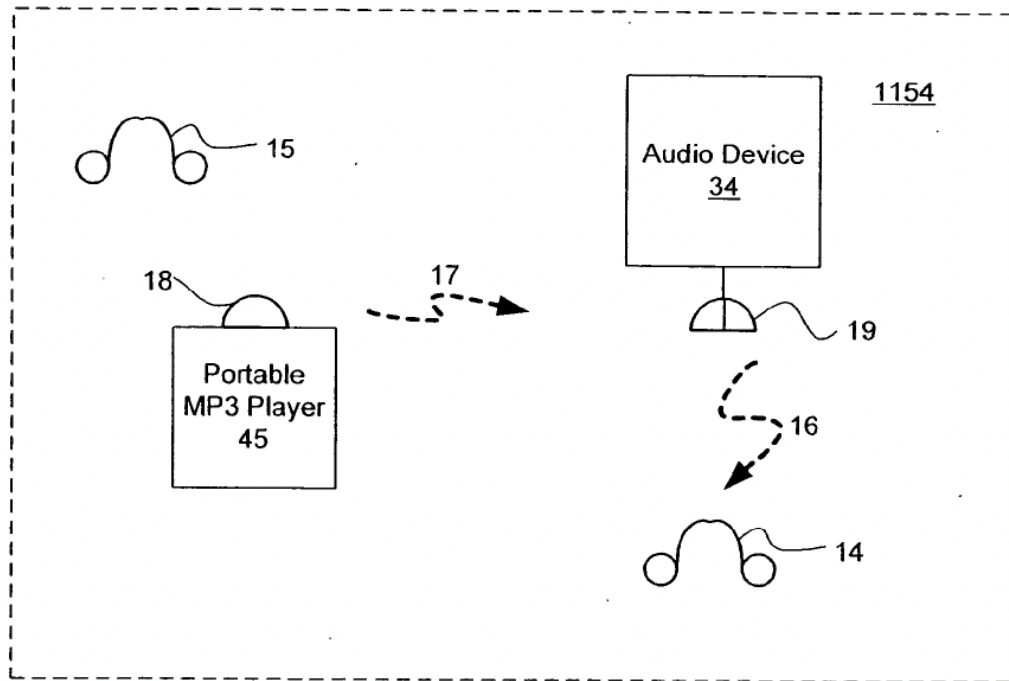


Fig. 27

In summary, Richenstein discloses several different devices that are either on the transmitting side (e.g., “audio device 34,” “computer 1142”) or the receiving side (“headphones 14,” “speaker 1144,” “speaker 1146”) of its disclosed “wireless headphone system.” The devices on the transmitting side are aggregators of various “audio sources” that combine multiple audio signals from the audio sources and organize them in a defined sequence, while the devices on the receiving side function to select one of these audio signals for playback. *See id.*, ¶¶33-45.

B. Richenstein Does Not Disclose Independent Claim 1

As previously discussed, Richenstein discloses a bifurcated system composed of two types of devices with distinct roles: (1) transmitting devices that function as aggregators of various “audio sources,” where multiple audio signals from the “audio sources” are combined and organized in a defined sequence—which Linkplay characterizes as prioritizing media content (*see* Pet. 48-49)—and (2) receiving devices that function to select one of these audio signals for playback. *Supra* §V.A. Because of this bifurcated configuration, no single Richenstein device is capable of ***both*** prioritizing media content from any particular audio source ***and*** playing back media content from any particular media source—let alone a line-in connected source. Accordingly, no single Richenstein device is configured with the functionalities set forth below:

- Limitation 1.3: ***arming the playback device so that receipt of a first type of media content preempts playback of a second type of media content;***
- Limitation 1.4: ***after arming the playback device, playing the second type of media content;***
- Limitation 1.5: ***while playing the second type of media content, determining that the playback device is receiving the first type of media content via a line-in connector;***

- Limitation 1.6: *in response to determining that playback device is receiving the first type of media content, **ceasing playback** of the second type of media content and **playing** the first type of media content;*
- Limitation 1.7: *determining that the playback device is no longer receiving the first type of media content;* and
- Limitation 1.8: *in response to determining that the playback device is no longer receiving the first type of media content, **ceasing playback** of the first type of media content and **rearming** the playback device so that subsequent receipt of the first type of media content preempts playback of the second type of media content.*

Thus, Richenstein does not disclose independent claim 1. Richenstein's shortcomings as to the foregoing limitations are confirmed by Linkplay's mapping of six different Richenstein devices without a single Richenstein device disclosing each and every limitation of the independent claims. *See infra* §V.C.

C. Linkplay's Anticipation Theory (Ground 3) Involves Six Different Richenstein Devices with No Single Device Disclosing Every Limitation

Linkplay's anticipation theory for Ground 3 is a tangled web that is pieced together with no fewer than six different Richenstein devices without a single Richenstein device disclosing each and every limitation of the independent claims. This alone dooms Ground 3 as a matter of law. *C.f. Crown Operations Int'l, Ltd. v. Solutia Inc.*, 289 F.3d 1367, 1375 (Fed. Cir. 2002) ("A patent is invalid for

anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference.”).

To unpack this further, Linkplay alleges that the following six Richenstein devices each individually amounts to the claimed “*playback device*”:

1. audio device 34 (Fig. 27);
2. headphones 14 (Figs. 1, 27);
3. computer 1142 (Fig. 26);
4. headphones 14 (Fig. 26);
5. speaker 1144 (Fig. 26); and
6. speaker 1146 (Fig. 26).

Pet., 43-44.

Linkplay characterizes these Richenstein devices into “two categories of *playback devices*: (1) those on the transmitting side that transmit audio data to another device, and (2) those on the receiving side that receive audio data from another device.” *Id.*, 42. Specifically, as previously discussed, “audio device 34” and “computer 1142” are transmitting side devices that serve as aggregators of various “audio sources,” while “headphones 14,” “speaker 1144,” and “speaker 1146” are receiving side devices that serve to playback audio received from the transmitting side. *Supra* §V.A. Starting with this fractured premise—and instead of

mapping a single Richenstein device to each and every claim limitation—Linkplay’s anticipation theory relies on piecemeal mappings, assigning different Richenstein devices to different claim limitations, and in some instances, assigning multiple Richenstein devices *within* the same claim limitation. Linkplay’s piecemeal anticipation theory is discussed in more detail below.

1. No Single Richenstein Device Discloses Limitations 1.3 & 1.4

For limitation 1.3, Linkplay only asserts that Richenstein’s “audio device 34 can perform this functionality,” and “a POSITA would understand that the computer 1142 can do the same” without adequately explaining why a POSITA would have had such an understanding. Pet., 49. At a minimum, Linkplay has failed to establish that the remaining Richenstein devices that purportedly amount to the claimed “*playback device*”—namely, headphones 14 (Figs. 1, 27), headphones 14 (Fig. 26), and speakers 1144 and 1146 (Fig. 26)—disclose limitation 1.3. Thus, these four Richenstein devices do not anticipate independent claim 1.

Despite this, for limitation 1.4—which requires the claimed “*playback device*” to be configured to, “*after arming the playback device, play[] the second type of media content*”—Linkplay asserts that the “audio device 34” and “the computer 1142” are each configured to perform the “*arming*” functionality, and the “headphones 14 or speakers 1144, 1146” are configured to “*play[] the second type of media content*”:

For example, audio device 34, while sending audio data to *headphones 14* in a non-priority channel *for playing* according to a listener's selection, is already capable of transmitting a priority channel to headphone 14 to "automatically override the listener's selection." Richenstein, [0048]; see also Richenstein, [0147], [0193]; EX1003, ¶164.

Similarly, while transmitting computer generated audio data to *headphone 14 or speakers 1144, 1146*, computer 1142 is also already capable of transmitting priority signals to these receiving devices in "a separate priority [channel that will be] automatically selected when such data is received." Richenstein, [0193]. See EX1003, ¶165.

Id., 50.

Linkplay maps multiple, distinct Richenstein devices to limitation 1.4 in this piecemeal fashion because Richenstein itself describes these devices as serving distinct roles as discussed above. *Supra* §V.A. Because Linkplay does not (and cannot) identify a single Richenstein device that discloses *both* limitations 1.3 and 1.4., Linkplay has failed to establish that Richenstein anticipates independent claim 1 as a matter of law. *See, e.g., Crown Operations*, 289 F.3d at 1375 (Fed. Cir. 2002) ("A patent is invalid for anticipation when the same device or method, having all of the elements contained in the claim limitations, is described in a single prior art reference.").

2. No Single Richenstein Device Discloses Limitation 1.5

Limitation 1.5 recites that the claimed "*playback device*" is configured to,

“while playing the second type of media content, determin[e] that the playback device is receiving the first type of media content via a line-in connector.” In this regard, limitation 1.5 imposes three specific requirements: the claimed *“playback device”* must (1) include a *“line-in connector,”* (2) be configured to *“determin[e] that [it] is receiving the first type of media content via a line-in connector,”* and (3) be capable of making that determination *“while playing the second type of media content.”* Linkplay’s anticipation theory with respect to limitation 1.5 is legally deficient as a matter of law for two main reasons.

First, Linkplay relies on multiple Richenstein devices without identifying a single Richenstein device that discloses both the first and third requirements of limitation 1.5. Specifically, Linkplay relies exclusively on Richenstein’s transmitting device—i.e., “audio device 34” or “computer 1142”—for the first requirement, and Linkplay relies exclusively on Richenstein’s receiving device—i.e., “headphones 14 or speakers 1144, 1146”—for the third requirement. Pet., 52-53; *see also id.*, 50 (mapping only “headphones 14 or speakers 1144, 1146” to *“playing the second type of media content”* for limitation 1.4.). As a result, Linkplay fails to identify a single Richenstein device that satisfies both the first and third requirements of limitation 1.5. Thus, Linkplay has failed to establish that Richenstein anticipates independent claim 1 as a matter of law. *See, e.g., Crown Operations*, 289 F.3d at 1375 (Fed. Cir. 2002).

Second, as to the second requirement of limitation 1.5, Linkplay fails to expressly identify which Richenstein device is configured to “*determin[e] that [it] is receiving the first type of media content via a line-in connector*”—leaving both Sonos and the Board to speculate. *See* Pet., 51. Essentially, Linkplay requires Sonos and the Board to analyze the cited portions of Richenstein to determine which one of the six Richenstein devices maps to this limitation. However, “[i]t is a requirement of a Petition to align the evidence and arguments with the various limitations of the challenged claims,” and “[Linkplay] should not expect [the Board] to infer or create arguments from the record.” *Zscaler, Inc. v. Symantec Corp.*, IPR2017-01342, 2018 WL 5880955, at *11 (PTAB Nov. 9, 2018) (quotations omitted) (finding no anticipation because “Petitioner’s arguments fail to persuasively identify portions of [the prior art] that disclose the claimed elements and fail to adequately explain the relevance of the cited portions of [the prior art].”).

3. No Single Richenstein Device Discloses Limitation 1.6

Limitation 1.6 requires the claimed “*playback device*” to be configured to, “*in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content.*” As with the limitations discussed above, Linkplay impermissibly assigns multiple Richenstein devices to limitation 1.6 and fails to identify a single Richenstein device that discloses every element of limitation 1.6.

For further context, in addressing limitation 1.4, Linkplay asserts that “audio device 34” and “computer 1142” are configured to “automatically override the listener’s selection,” and “headphone 14 or speakers 1144, 1146” are configured to “*play[] the second type of media content*” *Id.*, 50. For limitation 1.6, Linkplay contends that “[a]s *discussed above*, Richenstein’s priority channel can ‘automatically override the listener’s selection of one of the stereo channels,’ which constitutes *ceasing playback of the second type of media content* (e.g., stop playing the listener’s current selection of non-priority channel) *and playing the first type of media content* (e.g., the priority channel).” Pet., 53. In this regard, Linkplay asserts that “audio device 34” and “computer 1142” are each configured to perform the first half of limitation 1.6, and “headphone 14 or speakers 1144, 1146” are each configured perform the second half of limitation 1.6.

As before, because Linkplay fails to identify a single Richenstein device that discloses limitations 1.6, Linkplay has failed to establish that Richenstein anticipates independent claim 1 as a matter of law. *See, e.g., Crown Operations*, 289 F.3d at 1375 (Fed. Cir. 2002).

4. Linkplay Leaves Sonos and the Board Guessing as to Which Richenstein Device Discloses Limitations 1.7-1.8

As with the second requirement of limitation 1.5 discussed above, Linkplay fails to expressly identify which Richenstein device discloses limitations 1.7 and 1.8—leaving both Sonos and the Board to speculate. *See* Pet., 51. Linkplay

effectively requires Sonos and the Board to guess which one of the six Richenstein devices maps to limitations 1.7 and 1.8. However, as previously explained, “[i]t is a requirement of a Petition to align the evidence and arguments with the various limitations of the challenged claims,” and “[Linkplay] should not expect [the Board] to infer or create arguments from the record.” *Zscaler, Inc.*, 2018 WL 5880955, at *11. Because Linkplay fails to expressly identify which Richenstein device discloses limitations 1.7 and 1.8, Linkplay has failed to establish that Richenstein anticipates independent claim 1 as a matter of law. *See, e.g., id* (finding no anticipation because “Petitioner’s arguments fail to persuasively identify portions of [the prior art] that disclose the claimed elements and fail to adequately explain the relevance of the cited portions of [the prior art].”).

D. Linkplay Improperly Maps the Same Disclosure in Richenstein to Limitations 1.3 and 1.6 (Grounds 3 & 4)

As previously explained, it is improper to map the same prior art disclosure to satisfy multiple, distinct claim limitations that intrinsic evidence confirms are separate and distinct. *Supra* §III (citing cases). Yet, as with Barbe, Linkplay does precisely that with Richenstein.

Specifically, Linkplay attempts to map Richenstein’s disclosure of “automatically overrid[ing] the listener’s selection of one of the stereo channels” to both limitations 1.3 and 1.6 as shown below.

Limitation 1.3 (see Pet., 48)

Richenstein discloses the same “arming” of the disclosed playback device such that the “armed” playback device is capable of performing automatic switching of audio sources. *See* EX1003, ¶157. For example, Richenstein discloses an automatic channel selection feature where a priority channel can cut in and override a non-priority channel, such that the non-priority channel is automatically switched to the priority channel. *See* Richenstein, [0048], [0050], [0147], EX1003, ¶157.

Limitation 1.6 (see Pet., 53)

As discussed above, Richenstein’s priority channel can “automatically override the listener’s selection of one of the stereo channels,” which constitutes *ceasing playback of the second type of media content* (e.g., stop playing the listener’s current selection of non-priority channel) *and playing the first type of media content* (e.g., the priority channel). Richenstein, [0048]; *see also* Richenstein, [0048], [0147], EX1003, ¶173.

Compare Pet., 48 *with* 53.

In this way, Linkplay relies on the same disclosure—namely, Richenstein’s disclosure of “automatically overrid[ing] the listener’s selection of one of the stereo channels”—to assert that Richenstein discloses a purported “*playback device*” that is configured to both (1) “*arm[]*” itself to prioritize a line-in connected source over another source (limitation 1.3), **and** (2) *in response to determining that playback device is receiving the first type of media content, ceasing playback of the second type of media content and playing the first type of media content* (limitation 1.6).

However, as previously discussed, the Board has ***repeatedly*** denied institution when a petition ground maps the same prior art disclosure to multiple separate and distinct claim limitations. *Supra* §IV.C.1 (citing cases). The Board should likewise deny institution of this Petition on that basis.

E. Richenstein Does Not Render Any Claim Obvious (Ground 4)

For Ground 4, Linkplay does little to rectify its fragmented anticipation theory. Critically, Linkplay’s obviousness argument for the independent claims consists solely of a single conclusory sentence addressing only the preamble of

independent claim 1: “To the extent a built-in or an external speaker is not disclosed, a POSITA would find it obvious to include such a speaker in audio device 34 and/or computer 1142 to produce sound locally, thereby enhancing their usability.” Pet., 45. The Petition is otherwise devoid of any obviousness argument addressing the independent claims, including the claim limitations discussed above. *See id.*, 45-56. This deficiency is dispositive of Ground 4 as a matter of law.

Indeed, to establish *prima facie* obviousness, Linkplay must “identify a reason that would have prompted a [POSITA] to combine the elements in the way the claimed new invention does.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Accordingly, “a clear, evidence-supported account of the contemplated workings of the combination is a *prerequisite* to adequately explaining and supporting a conclusion that a [POSITA] would have been motivated to make the combination and reasonably expect success in doing so.” *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017) (emphasis added).

Here, Linkplay’s single conclusory sentence with respect to the preamble fails to establish a *prima facie* showing of obviousness. At a minimum, Linkplay provides *no* explanation of how its proposed modification would work and why a POSITA would reasonably expect success in doing so—leaving both Sonos and the Board to speculate. Simply put, the Board should not be required to speculate how a POSITA would accomplish Linkplay’s proposed modification. *See, e.g., Apple*

Inc. v. Contentguard Holdings, Inc., IPR2015-00356, 2015 WL 4036186, *6 (PTAB. June 26, 2015) (denying institution because “the Petition leaves the Board to speculate about how the various [reference] elements having similar functionality to the claimed elements would be modified to arrive at the claimed subject matter, and the rationale for why a [POSITA] would have made the modification.”); *Apple Inc. v. Parus Holdings, Inc.*, IPR2022-00948, 2022 WL 17254066, *7 (PTAB Nov. 28, 2022) (same).

Accordingly, Linkplay’s conclusory one-sentence obviousness assertion falls well short of establishing that Richenstein alone renders independent claim 1 obvious as a matter of law. *See, e.g., In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements.”); *American Imaging Services, Inc. v. Intergraph Corp.*, 250 F.3d 757, *6 (Fed. Cir. 2000) (showing of suggestion or motivation to combine “must be unequivocal, and cannot rest on broad conclusory statements about what the prior art suggests to one of ordinary skill in the art.”).

VI. CONCLUSION

The Board should deny institution of this Petition in light of the Petition’s weak merits and numerous legal deficiencies that foreclose any finding of unpatentability as a matter of law.

Respectfully submitted,

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Dated: July 11, 2025

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CERTIFICATE OF WORD COUNT

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