UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIFIED PATENTS, INC.,
Petitioner,

v.

MONKEYMEDIA, INC.,
Patent Owner.

Case IPR2018-00059
Patent 9,247,226 B2


HOFF, Administrative Patent Judge.

DECISION
Institution of Inter Partes Review
37 C.F.R. § 42.108
I. INTRODUCTION


Under 35 U.S.C. § 314(a), an inter partes review may not be instituted unless it is determined that there is a reasonable likelihood that the petitioner would prevail with respect to at least one of the claims challenged in the petition. Based on the information presented in the Petition and Preliminary Response, we are persuaded that there is a reasonable likelihood Petitioner would prevail with respect to claims 1 and 7 on Petitioner’s asserted combination of Lavallee, Gibson, Cohen, and Strickland. We are not persuaded, however, that there is a reasonable likelihood Petitioner would prevail with respect to claims 1–10 on Petitioner’s asserted combination of Davenport and Efrat because Petitioner does not properly account for all the limitations of independent claims 1 and 7 in its analysis of Davenport. Similarly, we are also not persuaded that there is a reasonable likelihood Petitioner would prevail with respect to claims 11 and 12 based on Petitioner’s asserted combination of Davenport, Efrat, and Bartok.

Accordingly, we institute an inter partes review of claims 1 and 7 on the ground specified below. We further decline to institute an inter partes review of claims 2–6 and 8–12, for the reasons set forth below.
Our factual findings and conclusions at this stage of the proceeding are based on the evidentiary record developed thus far. This is not a final decision as to patentability of claims for which inter partes review is instituted.

II. BACKGROUND

A. The ’226 patent (Ex. 1001)

The ’226 patent concerns a method for playing a stored content providing a plurality of segments which collectively contain the stored content. Ex. 1001, 7:31–33. Each of the segments has a first terminus and a second terminus, where the content in each of the segments has a temporal flow from the first terminus to the second terminus. Id. at 7:33–36. At least one segment is associated with a plurality of links to a corresponding plurality of other segments. Id. at 7:36–38. “The method includes playing at least one segment with the temporal flow, determining whether a content expansion is desired prior to reaching the second terminus. If content expansion is desired, the method links to an expansion segment and playing the expansion segment.” Id. at 7:39–43. If content expansion is not desired, the method “links to a continuing segment and playing the continuing segment.” Id. at 7:44–45. “The method includes an additional link from the expansion segment to the continuing segment such that the continuing segment is played after the expansion segment has been played.” Id. at 7:39–48.
Figure 3B “schematically depicts the segment links between continuous play media segments.” *Id.* at 11:25–26. As described in the ’226 patent, Figure 3B illustrates a continuous play media segment 100 having “two links 114 and 116 to other continuous play media segments.” *Id.* at 12:42–43. Continuity link 114 connects to the start 120 of continuous play media segment 104. *Id.* at 12:44–45. The temporal start of a segment or frame sequence is denoted as the first terminus and the temporal end of a segment of frame sequence is denoted as the second terminus. *Id.* at 12:45–48. “Continuous play media segment 100 contains an expansion link 116 to continuous play media segment 102. Continuous play media segment 102 contains a link 118 to continuous play media segment 104.” *Id.* at 12:48–52.

The method of the invention includes playing the stored content segment with temporal flow [e.g., segment 100 in Figure 3B] and determining whether a content expansion is desired prior to reaching the second terminus. *Id.* at 9:42–45. If the content expansion is desired, the method calls for linking to an expansion segment (e.g., segment 102 in
Figure 3B) and playing said expansion segment. \textit{Id.} at 9:45–46. If the content expansion is not desired, the method calls for linking to a continuing segment of stored content (e.g., segment 104 in Figure 3B) and playing said continuing segment. \textit{Id.} at 9:47–49. There is an additional link from the expansion segment of stored content to the continuing segment of stored content, such that the continuing segment of stored content is played after the expansion segment of stored content has been played. \textit{Id.} at 9:45–53.

During prosecution, the claims of the ’226 patent were amended to include the phrase “interruption terminus of the first portion” in place of “the second terminus of the first segment.” The claims were further amended to include the phrase “resume-point terminus of a continuing portion” in place of “the first terminus of a continuing segment.” \textit{Compare} Ex. 1002, 51 (Prosecution History of the ’226 patent) \textit{with} Ex. 1002, 97. Thus, the claim phrases “interruption terminus of the first portion” and “resume-point terminus of a continuing portion” do not appear in the originally filed Specification or claims.

\textbf{B. Challenged Claims}

Claims 1 and 7 are independent. Claims 2–6 depend from claim 1. Claims 8–12 depend from claim 7. Claim 1 is reproduced below:

1. One or more tangible computer readable storage media (wherein said computer readable storage media is not a propagated signal(s)) storing instructions that when executed by a computer are capable of causing the computer to:
   a. begin fetching a primary content comprising a primary content continuous play media stream;
   b. generate a signal to display a first portion of the primary content continuous media stream comprising a first stored audio and/or visual content of the primary content continuous play media stream, wherein an
interruption terminus of the first portion and a resume-point terminus of a continuing portion of the primary content continuous media stream that continues the primary content continuous play media stream from the interruption terminus of the first portion in the primary content continuous play media stream are established during display of the first portion at an expansion decision point if a content expansion is selected by a user;

c. provide a highlighted expansion cue to the user during display of the first portion indicating an option for the user to elect to access the content expansion comprising an optional content continuous play media stream, whereby the display of the expansion cue is distinct from the display of the first portion;

d. determine whether the content expansion is selected and establish the expansion decision point and a beginning of the content expansion based on when the user elected the content expansion;

e. generate a signal to display a change in the expansion cue if the content expansion is elected by the user during display of the first portion;

f. interrupt the display of the first portion at the interruption terminus of the first portion if the content expansion is elected by the user during display of the first portion;

g. provide an expansion link from the first portion to an expansion portion of the optional content continuous play media stream comprising a second stored audio and/or visual content, and generate a signal to display the second stored audio and/or visual content of the expansion portion if the content expansion is selected, wherein the displayed second stored audio and/or visual content is spatiotemporally continuous with the displayed first stored audio and/or visual content and with a displayed third stored audio and/or visual content of the continuing portion whereby the display of the second stored audio and/or visual content replaces the display of the first stored audio and/or visual content after at most a small amount of time and whereby the display of the third stored audio
and/or visual content replaces the display of the second stored audio and/or visual content after at most a small amount of time, and wherein a transition is played from the displayed first stored audio and/or visual content to the displayed second stored audio and/or visual content;

h. provide a continuity link from the expansion portion to the continuing portion and generate a signal to display a third stored audio and/or visual content of the continuing portion after finishing the display of the expansion if the content expansion is elected; and

i. provide a continuity link from the first portion to the continuing portion and generate a signal to display the third stored audio and/or visual content of the continuing portion if the content expansion is not elected, wherein the displayed third stored audio and/or visual content is spatiotemporally continuous with the displayed first stored audio and/or visual content whereby the display of the third stored audio and/or visual content replaces the display of the first stored audio and/or visual content after at most a small amount of time.


Independent claim 7 is a method claim that largely parallels independent claim 1, but recites the additional limitation of “playing a transition from the first stored content to the second stored content.”


C. Proposed Grounds of Unpatentability and Evidence Relied Upon

Petitioner advances the following challenges under 35 U.S.C. § 103(a):

2. Claims 1–10 as unpatentable over Davenport et al., U.S. Patent No. 5,101,364, issued Mar. 31, 1992 (“Davenport”) (Ex. 1009) in view of Efrat et al., PCT International Publication No. WO98/04984 (“Efrat”) (Ex. 1010); and


Petitioner supports its challenges with a declaration of Dr. Michael Kotzin (Ex. 1003). Patent Owner disputes Petitioner’s challenges and offers in support of its position a declaration of Mr. Christen Armbrust (Ex. 2001).

Related Proceedings


III. ANALYSIS

A. Overview of Asserted Reference Lavallee

Lavallee relates to conveying program information to a user in a linear fashion, while allowing the user to request additional program information relating to a particular “scene” being viewed. See Ex. 1004, Abstract. Figure 1 of Lavallee is reproduced below.
Figure 1 depicts a hierarchical scene structure contemplated by embodiments of the invention of Lavallee. *Id.* at 3:23–24. “Each of scenes 1, 2, 3, . . . etc. to infinity is contemplated to be initially conveyed to the user for viewing. Each of these scenes can be thought of as logical program segments of the program information conveyed to the user.” *Id.* at 4:28–31. Assume, for example, that in “Scene 2” as shown in the Figure, an athlete is endorsing his brand of home fitness equipment. If the user wanted more information concerning the endorsed products, he or she can indicate this (e.g., by activating a control device) while that particular endorsement is being viewed. A signal would then be sent to the device that actually conveys and/or stores the program information . . . indicating that additional program information should be sent to the user.

*Id.* at 4:52–61.
In this particular example, Scene 2.1 represents a first portion of the additional program information concerning the home fitness equipment. *Id.* at 4:54–64. When the end of scene 2.n is eventually reached, embodiments of the invention contemplate that the program information subsequently conveyed to the user will be the original requesting scene (i.e., Scene 2) or, in other embodiments, it might be the scene after the requesting scene (i.e., Scene 3). *See id.* at 5:7–13. Potentially, “any number of different hierarchical levels can be implemented. For example, if the user is viewing scene 2.2 concerning the bench-press, and wants even more detailed program information, they can indicate this, and obtain Scene 2.2.1, showing detailed information concerning the bench-press.” *Id.* at 5:36–42.

**B. Overview of Asserted Reference Gibson**

Gibson concerns a method and system for associating datasets with an animated element depicted in a multimedia presentation operating within a data processing system, and notifying a user of the existence of an associated data set during a relevant portion of the multimedia presentation. Ex. 1005, 2:1–9. Figure 3B of Gibson is reproduced below:
According to Gibson, Figure 3B is a pictorial representation of a data processing system display at a point in time during a multimedia presentation. *Id.* at 2:45–47. Figure 3B depicts “first running person 302 leaving the field of view, and second running person 304 entering the field of view. Graphic indicator 306 . . . may be utilized to indicate the presence of an associated data set stored within data processing system 50 . . . which is also currently relevant to this portion of the multimedia presentation. Such an associated data set may . . . contain additional information concerning second running person 304, and may be in the form of text, graphics, sounds, animated graphics, synthesized speech, or video. A data processing system user may choose to view or listen to the associated data set,” by requesting that the additional dataset be presented. *Id.* at 4:7–20.

C. **Overview of Asserted Reference Strickland**

Strickland concerns machine control manual data input facilities. Touch-screen displays are provided to lead an operator through selection of
desired functions and entry of required parameter data. See Ex. 1006, 1:34–55. Figure 3 of Strickland is reproduced below:

![Figure 3: Main Graphical Manual Data Input (MDI) Display](image)

Figure 3 is a main graphical manual data input (MDI) display. See id. at 2:1. Push button displays 141, 142, 144, and 145, inter alia, are used to select various functions. See id. at 7:12–22. For example, push button display 142 is used to select graphic assisted MDI mode. Id. at 7:17–18. Display 142 is made to appear depressed when the graphic assisted MDI mode is active. Id. at 7:19–20.

D. Overview of Asserted Reference Cohen

Cohen concerns a computer controlled display system, including method and apparatus for transitioning between two sequences of digital information stored in a computer system. Ex. 1007, 4:64–68.

The method involves a process for user definition and manipulation of a transition resource for defining the transition between one audio stream of information and another audio stream of information. The method also involves a process for
user definition and manipulation of a rate of transition control means which specifies the rate of transition during the transition between the first sequence of information and the second sequence of information.

*Id.* at 5:1–9.

Figures 1A–1E of Cohen are reproduced below:
Figures 1A–1E of Cohen illustrate five types of transitions from a first sequence of images to a second sequence of images. *Id.* at 6:41–50.

**E. Overview of Asserted Reference Davenport**

Davenport concerns a common data structure that permits designation of relationships between video and/or image segments. *See* Ex. 1009, 2:61–3:1.

[A] displayed video segment of portion thereof is accompanied by simultaneous on-screen presentation of a set of motion icons (‘micons’) that has been chosen by the user or the author of the video segment, and “linked” thereto. During presentation of the video segment (or portion thereof), the viewer may select any of the displayed micons and thereby interrupt the current video segment with the segment represented by the chosen micon. On-screen presentation of the new video segment will feature a new set of micons. Preferably, if the viewer does not cause a further interruption by selection of one of the new micons, the system completes presentation of the selected segment and thereafter returns to the location of the interrupt on the original segment. The remainder of the original segment is then presented.

*Id.* at 3:56–4:3.

**F. Overview of Asserted Reference Efrat**

Efrat concerns a system and method for linking information to and accessing information from a video. The method for linking information includes the steps of defining a hotspot in a frame of video and linking the
hotspot to a target. In one embodiment, the hotspot is tracked in other frames, such as later or earlier frames, of the video. See Ex. 1010 at 1:33–2:4. The method for accessing information includes the steps of displaying the video, and executing a target in the video. In another embodiment, a hotspot may be actuated. In yet another embodiment, the video may be displayed on a television. Id. at 2:5–8.

G. Overview of Asserted Reference Bartok

Bartok concerns an apparatus and method for mapping a graphical object of arbitrarily complex shape to a “hot spot object” of virtually the same shape. Ex. 1017, 2:34–37. “Hot spots” are overlaid on an image within a “hot spot object” to allow selection of content associated with the “hot spots.” Id. at 2:38–41; Figs. 2, 3. Figure 2 illustrates examples of “hot spot objects” such as a file cabinet and a desk, displayed in an image, each containing “hot spots” such as drawers within them. See id. at 6:5–32; Fig. 2.

H. Claim Construction

Claims of an unexpired patent that will not expire before issuance of a final written decision are interpreted using the broadest reasonable interpretation in light of the specification. See 37 C.F.R. § 42.100(b); Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2144–46 (2016). Although the ’226 patent’s expiration date is not mentioned by either party, we note that the ’226 patent issued from an application filed September 10, 2012, and is a continuation of a chain of applications, the oldest of which was filed April 23, 1999. Ex. 1001, 1. Accordingly, the ’226 patent is not scheduled to expire before the expected issuance of a final written decision.
in this review. See 35 U.S.C. § 154(a)(2). Thus, we apply the broadest reasonable construction standard. See id.

Under the broadest reasonable construction standard, 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). The claims, however, “should always be read in light of the specification and teachings in the underlying patent,” and “[e]ven under the broadest reasonable interpretation, the Board’s construction ‘cannot be divorced from the specification and the record evidence.’” Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1298 (Fed. Cir. 2015) (citations omitted). Further, any special definition for a claim term must be set forth in the specification with reasonable clarity, deliberateness, and precision. See In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. See In re Van Geuns, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Petitioner proposes a construction of the claim phrase “highlighted expansion cue,” as “any type of display element that indicates to a user that a content selection is available.” Pet. 22. Patent Owner responds that Petitioner’s proposed construction would improperly read the term “highlighted” out of the claim, because the claim already recites “indicating an option for a user to elect to access the content expansion” or “indicating an option for a user to elect to access the optional expansion content.” Prelim. Resp. 13. Thus, Patent Owner contends that a “highlighted expansion cue” requires both (a) a user interface element that constitutes an
expansion cue, and (b) an effect applied to that user interface element that draws attention to that user interface element. *See id.*

We construe claim terms to the extent necessary for our analysis on whether to institute a trial. *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (explaining that only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy). Consequently, we address below Petitioner’s and Patent Owner’s proposed construction of the term “highlighted expansion cue” in the context of claims 1 and 7.

“*highlighted expansion cue*”

Claim 1 recites “provid[ing] a highlighted expansion cue to the user during display of the first portion indicating an option for the user to elect to access the content expansion comprising an optional content continuous play media stream, whereby the display of the expansion cue is distinct from the display of the first portion.” Claim 7 recites

providing a highlighted expansion cue to a user that is integrated with the display of the at least one segment indicating an option for the user to elect to access optional expansion content comprising an optional content continuous play media stream, whereby the display of the expansion cue is distinct from the display of the at least one segment.

Petitioner’s declarant, Dr. Kotzin, testifies:

*[T]he feature “highlighted expansion cue” refers to any type of visual cue that is perceivable by a user during a multimedia presentation to indicate that the user can make a selection to view optional content. In this regard, although the limitation uses the term “highlighted,” the feature itself can be met by any display element that is visible to the user and provides an indication that a content selection is available.*
Ex. 1003 ¶ 71.

Patent Owner’s declarant, Mr. Armbrust, states that “highlighting” refers to an effect in the user interface applied to a user interface element to draw attention to that user interface element. Ex. 2001 ¶¶ 38, 39; Prelim. Resp. 13. Patent Owner further asserts that the word “highlighted” must be given meaning in accordance with its dictionary definition. Prelim. Resp. 13–14.

Patent Owner cites intrinsic evidence in the Specification in support of its proposed construction. The description of Figure 4A, cited by Patent Owner, explains that “[t]he visual cue in certain preferred embodiments of the invention may be specifically chosen shapes. In certain preferred embodiments, the visual cues may be visually highlighted shapes.” Ex. 1001, 13:4–7. The description of Figure 5A uses nearly identical language. Id. at 13:52–56.

Figure 5B of the ’226 patent is reproduced below:

“Figure 5B shows the user view of multiple expansion cues 152 and 156 with expansion cue 156 contained in an expansion cue container 150 in accordance with an embodiment of the invention where expansion cue 152 is
further highlighted 160. Visual cue 152 is highlighted as depicted by region 160.” *Id.* at 13:63–67.

The intrinsic evidence supports Patent Owner’s argument that a “highlighted” expansion cue differs from a mere “expansion cue” in that some visual effect is applied to an expansion cue that tends to draw a user’s eye. For example, in Figure 5B, circular region 160 is added around the display of expansion cue 152, in order to increase the visual prominence of expansion cue 152.

Having reviewed the evidence of record at this stage of this proceeding, we agree with Patent Owner that the intrinsic evidence supports construing the term “highlighted expansion cue” to require both “(1) a user interface element that constitutes an expansion cue, and (2) an effect applied to that user interface element that draws attention to that user interface element.” Prelim. Resp. 13. For purposes of this Decision, we construe the term “highlighted expansion cue” in this manner. However, we further direct the parties to address fully the meaning of this term at trial, particularly as to whether the construction applied in this Decision is the broadest reasonable construction. In so doing, the parties should indicate all evidence in support of their positions, including citations to any relevant portions of the prosecution history.

I. **Legal Standard for Obviousness**

A claim is unpatentable under § 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. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of
obviousness is resolved 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) when in evidence, objective indicia of non-obviousness (i.e., secondary considerations). Graham v. John Deere Co., 383 U.S. 1, 17–18 (1966). “To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific reasoning, based on evidence of record, to support the legal conclusion of obviousness.” In re Magnum Oil Tools Int’l, Ltd., 829 F.3d 1364, 1380 (Fed. Cir. 2016). Furthermore, in assessing the prior art, the Board must consider whether a person of ordinary skill would have been motivated to combine the prior art to achieve the claimed invention. In re Nuvasive, 842 F.3d 1376, 1381 (Fed. Cir. 2016).

J. Asserted Obviousness of Claims 1 and 7 over Lavallee, Gibson, Strickland, and Cohen

Petitioner contends that claims 1 and 7 are unpatentable under 35 U.S.C. § 103(a) as obvious over Lavallee, Gibson, Strickland, and Cohen. Pet. 11–46.

Relying on Dr. Kotzin, Petitioner alleges that the combination of references discloses or suggests all of the limitations of challenged claims 1 and 7 and that a person having ordinary skill in the art would have combined the references in the manner asserted. Id.; Ex. 1003 ¶¶ 48–130. Petitioner relies on Lavallee for a teaching of a predominance of the claim limitations, with the following exceptions. See Pet. 13–20, 25–26, 29–39, 41–45; Ex. 1003 ¶¶ 51–70, 87–89, 98–111, 118–127.

Petitioner contends that Lavallee teaches limitation “c,” providing a “highlighted expansion cue,” by teaching “+” and “−” “pointers” in Figure 1;
Petitioner further contends in the alternative that Gibson teaches such a “highlighted expansion cue” through its disclosure of a “graphical indicator.” Pet. 20–24; Ex. 1004, Fig. 1; Ex. 1005, Fig. 3B. Petitioner asserts that it would have been obvious to modify Lavallee to display Gibson’s graphical indicator because indication of the presence of a selectable data set would have been recognized as beneficial for the user; because it would facilitate or simplify the selection of additional or alternative content; and because it would be merely the application of a known technique to a known system ready for improvement to yield predictable results. Pet. 24–25.

Petitioner asserts that limitation “e,” regarding displaying a change in the expansion cue if the content expansion is elected, is taught by Lavallee, Gibson, and Strickland. Pet. 26. Petitioner asserts that Lavallee and Gibson teach displaying a change in the expansion cue by simply presenting additional content that replaces displayed content, upon user selection. Pet. 27; Ex. 1004, 4:52–5:15; Ex. 1005, 2:10–27. Strickland is cited for its teaching of a user interface that changes the appearance of “push buttons” in relation to received user input. Pet. 28; Ex. 1006, 7:44–67.

Petitioner argues that Cohen discloses playing a transition from the displayed first stored audio and/or visual content to the displayed second stored audio and/or visual content. Pet. 39–40; Ex. 1007, 1:32–45.

In response, Patent Owner argues that the combination of references fails to disclose that “an interruption terminus of the first portion and a resume-point terminus of a continuing portion . . . are established during display of the first portion,” as recited in claim 1. Prelim. Resp. 3–8. Patent Owner further argues that the references fail to disclose or suggest
“providing a highlighted expansion cue to the user during display.” *Id.* at 8–17. Patent Owner also contends that the references do not disclose or render obvious “display[ing] a change in the expansion cue.” *Id.* at 17–21. Finally, Patent Owner argues that a person having ordinary skill in the art would not have been motivated to combine the references. *Id.* at 21–26.

Claim 1, limitation (b): Establishing interruption terminus of the first portion and resume-point terminus of a continuing portion during display of the first portion

Petitioner’s witness explains that Lavallee discloses that “user selection during a scene creates an intermediate point at which ‘additional program information’ is conveyed to the user. This then ‘establishes’ the ‘interruption terminus’ of a first part of ‘scene 2’ prior to the intermediate point and the ‘resume point terminus’ of a second part of ‘scene 2’ after the selection point.” Ex. 1003 ¶ 67.

Patent Owner argues that Lavallee fails to disclose establishing (both) an interruption terminus of the first portion, and a resume-point terminus of a continuing portion, during display of the first portion. Prelim. Resp. 3–7. According to Patent Owner:

[E]ven assuming that Lavallee’s ‘additional information’ operation discloses ‘establishing’ an ‘interruption terminus’ ‘during display’ of a first portion/segment, Petitioner’s expert wholly fails to explain how or why the ‘resume-point terminus’ would necessarily or inherently be ‘established’ at the same time. Indeed, Lavallee’s disclosures are silent regarding the mechanism and timing of establishing a ‘resume-point terminus’ in its ‘additional information’ operation.

Prelim. Resp. 5–6.
Patent Owner argues that Lavallee discloses a stack that “only stores a single time, and therefore does not itself establish both an ‘interruption terminus’ and a ‘resume point terminus.’” Prelim. Resp. 7; Ex. 1003 ¶ 65.

We are not persuaded by Patent Owner’s argument that Lavallee fails to establish both an interruption terminus and a resume point terminus. First, it is not clear that the ’226 patent requires two unequal termini, as Patent Owner’s arguments imply. Some embodiments of the ’226 patent establish two termini that are not equal to each other; other embodiments establish equal termini.

The method includes playing at least one segment with the temporal flow, determining whether a content expansion is desired prior to reaching the second terminus. If the content expansion is desired, then linking to an expansion segment and playing the expansion segment . . . . The method includes an additional link from the expansion segment such that the continuing segment is played after the expansion segment has been played.”


The ’226 patent further discloses that “[i]f the content expansion is desired, then linking to an expansion segment, pushing the continuity link onto a link stack and playing the expansion segment.” Id. at 8:4–7. “There is an additional link from the expansion segment of stored content to the continuing segment of stored content such that the continuing segment of stored content is played after the expansion segment of stored content has been played.” Id. at 9:49–53.

Thus, the ’226 patent contemplates establishing an interruption terminus during display of a first portion; “pushing” the temporal value of that interruption terminus; and when playback of that expansion segment is
completed, “popping” that temporal value off the stack in order to resume playback of the original segment at the point where it was interrupted by user request of the expansion segment.

The ’226 patent further teaches that the interruption terminus and resume-point terminus (which, in certain embodiments, happen to be the same value) are established during display of the first portion, i.e., segment 100:

In certain preferred embodiments of the invention, [continuity] link 118 may be explicitly incorporated in [expansion] segment 102. In certain preferred embodiments, the link 118 may be implicitly derived from the remembered state of the content player during the playing of the segment 100. In certain, further preferred embodiments of the invention this implicit derivation may be determined by a stack included in the content player.


Second, Lavallee discloses that an interruption terminus and a resume-point terminus are established during display of a first portion. “If there are no more scenes at the same level, then the requesting scene (i.e., the scene from which additional program information was requested) will be conveyed back to the user (at, for example, the point where the user originally requested additional program information).” Ex. 1004, 9:40–45. “As an alternative to that, other embodiments contemplate that some other scene at the prior hierarchical level (such as the scene after the requesting scene) will be conveyed to the user.” Ex. 1004, 9:45–49. “[A]ssume a user is viewing scene 2.n, and that the scene ends. The program information then conveyed to the user would be either scene 2 or scene 3 (depending upon the embodiments implemented).” Ex. 1004, 9:55–58. Thus, depending on the embodiment of Lavallee that is implemented, a resume-point terminus
within scene 2 (i.e. the point at which the user originally requested additional program information), or at the beginning of scene 3 (the next scene of the original program), is established during display of a first portion, when the user requests the additional program information. *See id.* at 9:40–58.

*Providing a highlighted expansion cue to the user during display*

Although we agree with Patent Owner that Lavallee does not disclose providing a highlighted expansion cue, because the “+” and “-” pointers shown in Lavallee Figure 1 are not displayed to the user, Petitioner has made a sufficient showing that Gibson discloses a highlighted expansion cue as claimed. *See Prelim. Resp. 8–11; Pet. 21–24.*

Gibson discloses a multimedia presentation and further data sets associated therewith. *See Ex. 1005, 2:1–4.* Gibson Figure 3B illustrates animated element 304, a representation of a running person entering the field of view. *Ex. 1005, 4:7–9.* Graphic indicator 306, a rectangle around the running figure 304, “which is associated with, and following the motion of, second running person 304, may be utilized to indicate the presence of an associated data set stored within data processing system 40 . . . which is also currently relevant to this portion of the multimedia presentation.” *Ex. 1005, 4:9–15.* During the time period in which graphic indicator 306 is displayed and associated with animated element 304, a user may choose to view or listen to the associated data set if the user requests the additional data set be presented. *See Ex. 1005, 4:19–26.*

On the present record, under our construction of “highlighted expansion cue,” *supra,* Petitioner has shown sufficiently that animated element 304 corresponds to a user interface element that constitutes an
expansion cue, and that graphic indicator 306, the rectangle around running figure 304, corresponds to an effect applied to user interface element 304 that draws attention to that user interface element.

**Displaying a change in the expansion cue**

Patent Owner argues that Gibson fails to disclose “display[ing] a change in the expansion cue if the content expansion is elected by the user during display of the first portion,” as recited in claim 1 (and almost identically in claim 7), because Gibson discloses “terminating” the display of graphical indicator 306, and such termination of the display of an expansion cue fails to equate to “display[ing] a change in the expansion cue.” Prelim. Resp. 18–19. Patent Owner further argues that “Petitioner’s expert cites no disclosure in Gibson supporting any relationship between terminating the display of the graphical indicator 306 and action by the user.” Prelim. Resp. 20.

At this stage of the proceeding, we credit Petitioner’s witness Dr. Kotzin’s testimony characterizing the meaning of “display a change in the expansion cue,” namely that such change may encompass “any change in content display that results from a user selection of additional content.” Ex. 1003 ¶ 91. Gibson discloses that when a user selects an associated data set, the process presents the associated data set to the user, which may be accomplished by opening a separate window on display 204 and presenting the associated data set which may comprise a variety of multimedia formats. Ex. 1005, 6:60–65. Dr. Kotzin states, and Patent Owner does not contest, that display of indicator 306 is terminated “as the user is then displayed the additional content after the selection (which does not display the selected indicator).” Ex. 1003 ¶ 91. On the present record, we determine that the
claimed displaying a change in a graphical element encompasses removing, deleting, or overwriting the graphical element. We further agree with Petitioner that the termination of the display of Gibson’s graphic indicator (i.e., its replacement by other displayed content) occurs explicitly in response to user action selecting said graphic indicator.

As an alternative to the teachings of Gibson, Petitioner further relies on Strickland to disclose display of a change in a user interface item in response to user selection. Pet. 27–28; Ex. 1003 ¶ 92. Strickland discloses a manual data input facility of a machine control that confirms user selection of “push buttons” by visual alteration of the selected user interface item.

The user selects a process to be added or inserted to the process list by contacting touch screen 15 within the area of a push button display within the matrix of push buttons 138. Upon detection of contact and conversion of the contact location by touch screen interface 28, MDI control routines 44 effect an appearance change of the display of the associated push button. Shading and color is altered to give the appearance that the push button is being depressed.

Ex. 1006, 7:44–52.

At this stage of the proceeding, we credit Dr. Kotzin’s testimony that a person having ordinary skill in the art would have been motivated to modify Lavallee and Gibson in view of Strickland’s teaching of altering the appearance of a selected “push button,” because “this would enable Lavallee’s system to provide a user with visual confirmation of a selection.” Ex. 1003 ¶ 95. We further credit at this stage Dr. Kotzin’s testimony that such a modification would “improve the confirmation of a particular type of selection when different types of content [are] available for selection as taught by Lavallee.” Id. ¶ 96; Ex. 1004, 4:4–15. According to Dr. Kotzin,
Lavallee’s system as modified by Strickland “could provide a different type of change depending on whether a user has selected additional program or alternate program information, as discussed in Lavallee.” *Id.*

**Motivation to combine Lavallee, Gibson, Strickland, and Cohen**

Patent Owner argues that Strickland does not qualify as prior art because it is non-analogous to the invention recited in the ’226 patent. Patent Owner further contends that even if Strickland is considered to be analogous, the evidence of record does not provide a basis for concluding that a person having ordinary skill in the art would have recognized the desirability of providing the visual confirmation of selection of an expansion cue. Prelim. Resp. 25–26.

The analogous-art test requires that the Board show that a reference is either in the field of the applicant’s endeavor or is reasonably pertinent to the problem with which the inventor was concerned in order to rely on that reference as a basis for rejection. References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art.

*In re Kahn*, 441 F.3d 977, 986–87 (Fed. Cir. 2006).

Petitioner cites to Strickland for a teaching of a user interface that changes the appearance of “push buttons” in response to user input.

[T]he user selects a process to be added or inserted to the process list by contacting touch screen 15 within the area of a push button display within the matrix of push buttons 138. Upon detection of contact and conversion of the contact location by touch screen interface 28, MDI control routines 44 effect an appearance change of the display of the associated push button. Shading and color is altered to give the appearance that the push button is being depressed.

Ex. 1006, 7:44–52.
The '226 patent discloses that “selection of visual cue 152 causes the visual cue, in this case, a wallet, to cause a content expansion. This content expansion has a transition sequence depicted by 162 and 164. The wallet is opened in 162 and then expands in size with 164.” Ex. 1001, 14:27–30. This transition sequence serves as visual confirmation to the user of the selection of an expansion cue, to be followed by the playing of the corresponding expansion segment. See Ex. 1001, 14:13–15. Similarly, the alteration of shading and color in Strickland in response to detection of screen contact in the pertinent location serves as visual confirmation to the user of the selection of a particular “push button.” See Ex. 1006, 13:51–52. The change in button appearance in Strickland is therefore at least “reasonably pertinent” to the problem of providing visual confirmation of a user interface item selection faced by inventor Gould in the '226 patent. We therefore agree with Petitioner that Strickland is analogous to the '226 patent.

We have considered, and we do not agree with Patent Owner’s argument that Petitioner fails to explain or cite to evidence explaining why providing visual confirmation of a selection by changing a cue would have been more desirable than “simply showing the selected content after the user’s selection,” as is implemented by Lavallee and Gibson. Prelim. Resp. 25–26. First, Patent Owner has not provided support for its allegation that modification in further view of Strickland must be “more desirable.” Second, Petitioner cites to Strickland essentially in the alternative, to be added to the combination “if the Board determines that Lavallee and Gibson do not explicitly describe a ‘change’ in the expansion cue.” Pet. 27. Third, Petitioner fully articulates the desirability of modification in view of
Strickland’s teachings: “such a modification would provide visual confirmation to distinguish whether the user has requested a scene for additional program information or for alternate program information in Lavallee,” or alternately that altering visual appearance in response to selection “would be merely the application of a known technique (adjusting visual cues presented to users during a multimedia presentation) to a known system (Lavallee’s system) ready for improvement to yield predictable results.” Pet. 29; Ex. 1003 ¶¶ 96, 97.

Conclusion

Petitioner has established a reasonable likelihood of success in challenging claims 1 and 7 as unpatentable over Lavallee, Gibson, Strickland, and Cohen for the reasons set forth above.

We have reviewed the information provided by Petitioner, including the relevant portions of the supporting Kotzin Declaration. Petitioner has identified relevant disclosures in Lavallee, Gibson, Strickland, and Cohen, and has adduced evidence in support of its challenge, including the Kotzin Declaration. Pet. 11–47 (citing Ex. 1003 ¶¶ 48–130). We credit Petitioner’s evidence, including the testimony of Dr. Kotzin, in the absence of evidence to the contrary in the record before us. Based on the record at this stage of the proceeding, therefore, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing with respect to this challenge to claims 1 and 7.

K. Asserted Obviousness of Claims 1–10 over Davenport and Efrat

Petitioner’s analysis, as supported by the Kotzin Declaration, demonstrates where Petitioner contends each element of claim 1 is disclosed in Davenport and Efrat. Pet. 26–41 (citing Ex. 1003 ¶¶ 131–184). In pertinent part, Petitioner argues that Davenport teaches “providing a highlighted expansion cue to the user during display of the first portion” in that “Davenport discloses that ‘micons’ can be displayed in a ‘simultaneous on-screen presentation’ with an ‘original segment.’” Pet. 55; Ex. 1009 at 3:56–4:3. Petitioner again advances the proposed construction of “highlighted expansion cue” as “any type of display element that indicates to a user that a content selection is available.” Pet. 55–56.

Patent Owner argues that Davenport fails to demonstrate that both an interruption terminus and a resume-point terminus are established during display of the first portion. Prelim. Resp. 26–27. Patent Owner further contends that Davenport does not disclose or render obvious “providing a highlighted expansion cue to the user during display,” because Davenport contains no teaching of “highlighting,” i.e., a user interface technique applied to a user interface element that draws attention to that element. Prelim. Resp. 29. Patent Owner contends that Davenport does not disclose “display[ing] a change in the expansion cue,” in that Davenport simply removes the expansion cue from display, and because Efrat changes a cursor, rather than an expansion cue. Prelim. Resp. 31–37. Patent Owner further contends that Davenport does not disclose an expansion cue as one of a plurality of expansion cues “presented simultaneously in a visually distinguished subset of a display space otherwise filled by visual content,” as recited in dependent claim 5. Prelim. Resp. 37.
We have reviewed the information provided by Petitioner and Patent Owner. We agree with Patent Owner that the combination of Davenport and Efrat fails to disclose or suggest a highlighted expansion cue as recited in the claims. More particularly, we do not agree with Petitioner that Davenport discloses providing a highlighted expansion cue, because we find that Davenport does not disclose both (1) a user interface element that constitutes an expansion cue, and (2) an effect applied to that user interface element that draws attention to that user interface element. Davenport’s two drawing figures provide no illustration of the use or appearance of micons. Davenport explains that “[o]ur ‘motion icon’ image labels, hereinafter referred to as ‘micons,’ allow inherently temporal images to be identified with a temporal representation.” Ex. 1009 at 3:18–21. Davenport discloses that “[d]uring presentation of the video segment (or portion thereof), the viewer may select any of the displayed micons and thereby interrupt the current video segment with the segment represented by the chosen micon. On-screen presentation of the new video segment will feature a new set of micons.” Ex. 1009 at 3:60–66. While Davenport’s description corresponds to the claimed “expansion cue,” we find that Davenport describes no effect applied to any micon that draws attention to said micon. Accordingly, we find that Davenport does not disclose a highlighted expansion cue as claimed in the ’226 patent.

Accordingly, we determine that the information presented does not show a reasonable likelihood that Petitioner would prevail in establishing that claims 1–10 would have been obvious over the combination of Davenport and Efrat.
L. Asserted Obviousness of Claims 11 and 12 over Davenport, Efrat, and Bartok

Petitioner contends that claims 11 and 12 are unpatentable under 35 U.S.C. § 103(a) as obvious over Davenport, Efrat, and Bartok. Pet. 71–74.

Claim 11 depends from independent claim 7. Claim 12 depends from claim 11, which depends from independent claim 7. Claims 11 and 12 thus both incorporate the limitation

providing a highlighted expansion cue to a user that is integrated with the display of the at least one segment indicating an option for the user to elect to access optional expansion content comprising an optional content continuous play media stream, whereby the display of the expansion cue is distinct from the display of the at least one segment.

We have reviewed the information provided by Petitioner and Patent Owner. As discussed supra with respect to the asserted obviousness of claim 7 over Davenport and Efrat alone, we agree with Patent Owner that the combination of Davenport and Efrat fails to disclose or suggest a highlighted expansion cue as recited in the claims. Moreover, Petitioner does not rely on Bartok to cure this deficiency. Thus, we determine that the information presented does not show a reasonable likelihood that Petitioner would prevail in establishing that claims 11 and 12 would have been obvious over the combination of Davenport, Efrat, and Bartok.

M. Real Parties in Interest

In its Preliminary Response, Patent Owner argues that the Petition should be denied because Petitioner has failed to identify other real parties-in-interest. See Prelim. Resp. 48–53. In particular, Patent Owner asserts that “Unified has admitted that its business model involves collecting money from its members and then using that money to file IPR petitions against
patents that have been asserted against those members” and another entity “provides funding to Unified to challenge patents that threaten” that entity. *Id.* at 50–51. Patent Owner asserts that “Unified acts as a proxy to challenge patents on behalf of its members,” and that “[g]iven Unified’s business model and legal relationship with its members,” said other entity “constitutes an RPI under both the ‘pre-existing substantive legal relationship’ category and the ‘proxy’ category” discussed in *Taylor v. Sturgell*, 553 U.S. 880 (2008). Prelim. Resp. 49, 51. Thus, according to Patent Owner, the petition should be denied because said other entity is not listed as a real party-in-interest. *Id.* at 48–53.

The statute governing *inter partes* review proceedings sets forth certain requirements for a petition for *inter partes* review, including that “the petition identif[y] all real parties in interest.” 35 U.S.C. § 312(a)(2); *see also* 37 C.F.R. § 42.8(b)(1) (requirement to identify real parties-in-interest in mandatory notices). In accordance with 35 U.S.C. § 312(a)(2) and 37 C.F.R. § 42.8(b)(1), Petitioner identifies Unified Patents Inc. as the sole real party-in-interest and “certifies that no other party exercised control or could exercise control over Unified’s participation in this proceeding, the filing of this petition, or the conduct of any ensuing trial.” Pet. 1.

Whether a particular entity is a real party-in-interest is a “highly fact-dependent question” that is assessed “on a case-by-case basis.” Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012) (citing *Taylor v. Sturgell*, 553 U.S. 880, 893–95 (2008)). While multiple factors may be relevant to the inquiry, “[a] common consideration is whether the non-party exercised or could have exercised control over a party’s participation in a proceeding.” *Id.; see also Zoll Lifecor Corp. v. Philips*
Elec. North Am. Corp., Case IPR2013-00609, slip op. at 10 (PTAB Mar. 20, 2014) (Paper 15). Patent Owner provides no evidence that any other entity actually is controlling this particular proceeding, or is providing direct financing for this particular proceeding. Patent Owner asserts only that the fact that another entity “may not directly control Unified’s conduct of this IPR does not preclude Unified from constituting a proxy” for that entity “given that Unified’s entire business model is created based on members paying Unified to challenge patents that threaten those members.” Prelim. Resp. 51.

The mere fact that members provide payment to Unified for a subscription to Unified’s services is insufficient to show that these members are funding this particular inter partes review. The evidence does not show an obligation on Unified’s part to file inter partes review proceedings on behalf of any member in return for payment, nor does it show that Unified’s members have any control over when and how Unified spends the revenue received from its members. Petitioner states that “Unified has not communicated with any unnamed party relating to IPR2018-00059, and no party other than Unified directed, controlled, participated in, assisted with, or funded IPR2018-00059.” Pet. Reply 1 (citing Ex. 2008, 2–3). “Unified had sole and absolute discretion over its decision to challenge U.S. Patent 9,247,226 and continues to have sole and absolute discretion over this proceeding.” Pet. Reply 1–2.

We have considered the parties’ arguments and, on the record before us and for purposes of this Decision, we are not persuaded that the Petition should be denied for failure to name all real parties-in-interest.
IV. SUMMARY

We determine that Petitioner has not demonstrated a reasonable likelihood of prevailing on its challenge to claims 1–10 over the combination of Davenport and Efrat, or its challenge to claims 11 and 12 over the combination of Davenport, Efrat, and Bartok. Petitioner has demonstrated, however, a reasonable likelihood of prevailing on its challenge to independent claims 1 and 7 over the combination of Lavallee, Gibson, Strickland, and Cohen.

At this preliminary stage, we have not made a final determination as to the patentability of claims 1 and 7, or any underlying factual and legal issues.

V. ORDER

It is, therefore,

ORDERED that, pursuant to 35 U.S.C. § 314(a), an inter partes review of the ’226 patent is hereby instituted on the ground of obviousness of claims 1 and 7 over the combination of Lavallee, Gibson, Strickland, and Cohen;

FURTHER ORDERED that review based on any other proposed grounds of unpatentability is not authorized; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial commencing on the entry date of this Decision.
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