

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

CUSTOMPLAY, LLC,
Petitioner,

v.

CLEARPLAY, INC.,
Patent Owner.

Case IPR2014-00430
Patent 8,117,282 B2

Before KARL D. EASTHOM, JUSTIN T. ARBES, and
BARRY L. GROSSMAN, *Administrative Patent Judges*.

GROSSMAN, *Administrative Patent Judge*.

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

I. INTRODUCTION

CustomPlay, LLC (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–25 (all of the claims) of U.S. Patent No. 8,117,282 B2 (“the ’282 patent”). Paper 1 (“Pet.”). We instituted an *inter partes review* of claims 1–25 on the ground of obviousness under 35 U.S.C. § 103(a) based on Abecassis¹ and Malkin.² Paper 6 (“Dec. on Inst.”). ClearPlay, Inc. (“Patent Owner”) filed a Patent Owner Response. Paper 10 (“PO Resp.”). Petitioner filed a Reply. Paper 11 (“Pet. Reply”).

An oral hearing was held on April 20, 2015. A transcript of the hearing is included in the record. Paper 19 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine Petitioner has shown, by a preponderance of the evidence, that claims 1–25 are unpatentable.

A. Related Proceedings

The ’282 patent is related to the patents involved in IPR2013-00484, IPR2014-00339, and IPR2014-00383.

B. The ’282 Patent

The ’282 patent relates generally to the field of modifying playback of a multimedia presentation, such as a video, from a storage medium. Ex. 1001, col. 1, ll. 25–27. The ’282 patent describes, as “BACKGROUND,” for example, filtering out certain language, images, scenes, or other content not suitable for, or considered objectionable by, certain audiences. *Id.* at col. 1, ll. 40–55. As another example, a media player, such as a DVD player, is configured to upload playback

¹ US Pat. No. 6,408,128 B1, filed Nov. 12, 1998, issued June 18, 2002. Ex. 1004.

² US Pat. No. 6,317,795 B1, filed July 22, 1997, issued Nov. 13, 2001. Ex. 1005.

filters to a local memory or otherwise use playback filters from a removable storage medium in communication with a memory interface. *Id.* at col. 1, ll. 27–30.

The '282 patent applies filters to modify, e.g., skip or mute, certain portions of a video during playback. *Id.* at col. 1, ll. 35–36. The '282 patent also generally discloses a method for loading filter information to a media player. Ex. 1001, col. 2, ll. 15–16. There are two independent claims. Independent claim 1 is directed to the disclosed method. Independent claim 19 is directed to a media player. The method involves analyzing the status of a first memory reader adapted to communicate with a removable storage medium. *Id.* at col. 2, ll. 16–18. The method further involves establishing communication with a second storage medium and determining whether the second storage medium includes filtering information associated with a multimedia presentation. *Id.* at col. 2, ll. 19–23. During display of the multimedia presentation, such as during play of a DVD, the player continually checks the filter information to determine if a particular portion of a movie should be filtered. *Id.* at col. 3, ll. 33–36. A filter file or event includes a time code corresponding to a portion of the multimedia data to be filtered. *Id.* at col. 3, ll. 28–30. A match between the time code of the multimedia presentation and the time code in the filter file causes the execution of a filtering action. *Id.* at col. 3, ll. 30–33.

C. Illustrative Claim

Claims 1 and 19 are independent claims. Claim 1 is illustrative of the claimed subject matter and is reproduced below.

1. A method for loading filter information to a media player comprising:
analyzing a status of a first memory reader adapted to communicate with a removable non-transitory storage medium

including audio and visual data associated with a multimedia presentation;

establishing communication with a second non-transitory storage medium;

automatically determining whether the second non-transitory storage medium includes filtering information for the multimedia presentation, the filter information including at least one identification of a start time and end time associated with a portion of the multimedia presentation, the filtering information further including at least one filtering action for the portion of the multimedia presentation; and

providing for presentation of the multimedia presentation pursuant to the filtering information.

II. ANALYSIS

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs. LLC*, No. 2014-1301, 2015 WL 4097949, at *7–8 (Fed. Cir. July 8, 2015)

(“Congress implicitly approved the broadest reasonable interpretation standard in enacting the AIA,” and “the standard was properly adopted by PTO regulation”).

Claim terms also 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.

In re Translogic Tech., Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007).

We apply these general rules in construing the claims in the ’282 patent.

In the Decision on Institution, we interpreted two means-plus-function limitations in the claims of the ’282 patent as follows:

Term	Interpretation
“means for storing filter information” (claim 21)	Function: storing filter information Corresponding structure: memory in a memory card, memory stick, USB

Term	Interpretation
	flash drive and jump drive, laser or optical readable memory platform, or magnetic memory platform
“means for reading filter information from a non-transitory storage medium” (claim 22)	Function: reading filter information from a non-transitory storage medium Corresponding structure: a reader device capable of searching the non-transitory storage medium for computer-executable instructions or data structures stored thereon containing filter information

Dec. on Inst. 6–8. The parties do not dispute these interpretations in the Patent Owner Response and Petitioner’s Reply. Based on the full record developed during trial, we adopt our previous analysis for purposes of this Decision.

We also interpret the following limitation in claims 1 and 19: “filter information including at least one identification of a start time and end time associated with a portion of the multimedia presentation, the filtering information^[3] further including at least one filtering action for the portion of the multimedia presentation.” Patent Owner contends that the limitation means “(1) an identification of a first time within a multimedia presentation when a filtering action is started; (2) an identification of a second time within the multimedia presentation, subsequent to the first time, when the filtering action is ended; and

³ The claims refer to both “filtering information” and “filter information.” See, e.g., Ex. 1001, col. 14, ll. 26 (“filter information”), 35 (“filtering information”), 36 (“filter information”), 39 (“filtering information”). The Specification also uses both terms. See, e.g., *id.* at col. 2, ll. 16 (“filter information”), 22 (“filtering information”). We view these terms as interchangeable and having the same meaning in the context of the ’282 patent.

(3) the filtering action.” PO Resp. 5. We agree with Patent Owner that the start time and end time must be different in order to define a portion of a multimedia presentation. The Specification states, for example, that “[t]he portion of the multimedia presentation may be identified by a start (or interrupt) and end time (or resume code), by start and end physical locations on a memory media, [or] by a time or location and an offset value (time, distance, physical location, or a combination thereof, etc.).” Ex. 1001, col. 4, l. 67–col. 5, l. 5. Patent Owner’s proposed interpretation is consistent with the language of the claims and the Specification, and we adopt it for purposes of this Decision.

B. Asserted Ground of Unpatentability

1. Obviousness Based on Abecassis and Malkin

To prevail on its patentability challenge, Petitioner must establish facts supporting its challenge by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). Petitioner asserts that claims 1–25 are unpatentable under 35 U.S.C. § 103(a) over Abecassis and Malkin. Pet. 22–49; Pet. Reply 11–14. Patent Owner disagrees, and focuses its argument on the assertions that Malkin does not disclose or suggest a “navigation object” (PO Resp. 6, 20); that Malkin’s fuzz-ball control specification does not identify start and end times for a filtering action (*id.* at 7, 21); and that Malkin’s other control specifications do not constitute a “navigation object” (*id.* at 16).

We have reviewed the evidence and arguments presented by the parties and determine that Petitioner has demonstrated, by a preponderance of the evidence, that Abecassis and Malkin teach all of the limitations of the claims, and that a person of ordinary skill in the art would have had reason to combine their teachings to achieve the recited method or apparatus in claims 1–25.

Patent Owner acknowledges that, unlike some of the claims in the related *inter partes* reviews listed above, the claims of the '282 patent do not use the term “navigation object.” PO Resp. 3.⁴ Patent Owner also states, however, that all the challenged claims require the following three elements: (1) an identification of a start time of a portion of a multimedia presentation; (2) an identification of an end time of the portion; and (3) a filtering action for the portion. *Id.*; *see also id.* at 21 (“[E]ach claim generally requires three associated pieces of information which define (1) the filtering action to apply, (2) when to start the filtering action, and (3) when to stop the filtering action.”) (emphasis omitted). These same three elements are recited as being included in a “navigation object” in some of the claims in the related *inter partes* reviews. *See* Tr. 31, ll. 17–18 (“This first slide shows a

⁴ Throughout its Response, Patent Owner refers generally to “Ex. 2001; Ex. 2002; Ex. 2003; Ex. 2004; Ex. 2005,” which are exhibits from the related *inter partes* reviews. *See, e.g.*, PO Resp. 6 (arguing that Patent Owner’s arguments in the related proceedings “are equally applicable to the present IPR”), 7, 11, 16, 18, 19, 21 (“For each of the reasons given above and in the related IPRs, Malkin does not teach or suggest a navigation object.”). Exhibit 2001 is the Patent Owner Response in IPR2013-00484; Exhibit 2002 is the Patent Owner Response in IPR2014-00339; Exhibit 2003 is a Declaration of Sayfe Kiaei, Ph.D., filed in IPR2014-00339; Exhibit 2004 is the Patent Owner Response in IPR2014-00383; and Exhibit 2005 is a Declaration of Sayfe Kiaei, Ph.D., filed in IPR2014-00383. These non-specific references to documents from other proceedings are inconsistent with 37 CFR § 42.6(a)(3). *See Cisco Sys., Inc. v. C-Cation Techs., LLC*, Case IPR2014 00454, slip op. at 7–10 (PTAB Aug. 29, 2014) (Paper 12) (informative) (noting that “[o]ne purpose of the prohibition against incorporation by reference is to eliminate abuses” of the page limits established for the parties’ substantive papers, and that citing “large portions of another document, without sufficient explanation of those portions, amounts to incorporation by reference”). We do not consider information presented in other papers or exhibits, but not discussed sufficiently in Patent Owner’s Response. Moreover, the cited Responses and Declarations pertain to different claims of different patents, and are based on cases with a different record from the instant proceeding.

navigation object, and I've used figure 4B, this appears pretty much consistently in all the patents."); Tr. 34, ll. 4–6 ("I want to point out that the three associated pieces of information [start, stop or end, and filtering action] are the same in each of the three patents.");⁵ Tr. 35, l. 21–Tr. 36, l. 3 ("You're providing three separate pieces of information that define what you do, when you start it, and when you finish it. That's been our argument, it's been very consistent in all of these IPRs, it's the same argument we're making in all of our related litigations. That's what a navigation object is.")).

Petitioner takes the position that "[i]n each of the two independent claims of the '282 patent, the claim limitation 'filtering information'^[6] requires three distinct information elements, i.e., start time, end time, and a filtering action." Pet. 22 (emphasis omitted); *see also* Tr. 4, ll. 8–11 ("the principal issue, if not the only issue, that remains for the hearing concerns the navigation object or filtering information limitations that are found in all of the claims under review"). Patent Owner agrees, as discussed above, arguing, however, that the combination of Malkin and Abecassis does not teach or suggest a "navigation object" that defines the associated start time, end time, and filtering action. PO Resp. 20–21.

Patent Owner agrees with Petitioner that "to a large extent regarding what Clearplay does, what Abecassis does, what Malkin does, is very similar." Tr. 30, ll. 19–21. Patent Owner also states that

⁵ The three patents are the patents involved in related *inter partes* review proceedings IPR2014-00339, 00383, and 00430. All three proceedings were argued together. Tr. 3 ("This is the hearing for case number[s] IPR2014-00339, 383 and 430. The patent for 339 is 7,526,784, for 383 it's 7,543,318, and for the 430 case it's 8,117,282.").

⁶ Claim 1 uses the term "filtering information." Claim 19 uses the term "filter information." For our analysis, the terms have the same meaning.

from the user's perspective, it may be hard to tell a difference, especially with what Abecassis does and what Clearplay does. They are very, very similar. That doesn't matter. It's not what they do, it's how they do it, and that's what's been lost in Petitioner's argument. What matters is what's in the claims.

Tr. 31, ll. 1–5. We agree; what matters is what is claimed.⁷ Accordingly, we proceed to an analysis of the claims in the context of the references to determine whether the preponderance of the evidence establishes that the challenged claims would have been obvious in view of Abecassis and Malkin.

Section 103(a) provides that a patent claim is unpatentable when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a) (2004). In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Court set out a framework for applying the statutory language of § 103:

Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined.

Id. at 17–18. “While the sequence of these questions might be reordered in any particular case, the factors continue to define the inquiry that controls.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007).

⁷ “The name of the game is the claim.” Giles S. Rich, *The Extent of the Protection and Interpretation of Claims-American Perspectives*, 21 INT’L REV. INDUS. PROP. & COPYRIGHT L. 497, 499 (1990). See also *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention.’”).

The Supreme Court has made clear that we apply “an expansive and flexible approach” to the question of obviousness. *Id.* at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. To reach this conclusion, however, requires more than a mere showing that the prior art includes separate references covering each separate limitation in a claim. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). “Rather, obviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.” *Id.*

Against this general background, we consider the references, other evidence, and arguments on which the parties rely.

2. Scope and Content of the Prior Art

a. Abecassis

Petitioner states that “the issue is whether the combined teachings of [the] cited art would have suggested the claimed limitations of the ’282 Patent to those of ordinary skill in the art, not whether Malkin alone teaches or suggests the claimed ‘filtering information.’” Pet. Reply 11–12; *see* Pet. 20–23, 28–31. Specifically, Petitioner states “Malkin need only contribute an explicit filtering action to Abecassis’ segment definitions.” *Id.* at 13. As stated by Petitioner, “[w]e’re relying on Malkin to supply the third information element of the navigation object [i.e., the filtering action]. And that’s it. Everything else is in Abecassis.” Tr. 97, ll. 1–3. We briefly describe the “everything else” disclosed in Abecassis.

Abecassis discloses the use of “video maps” that identify the start, stop, and subject matter content of various scenes in a movie or other multi-media presentation. Ex. 1004, col. 16, ll. 13–22. A video map identifies the beginning frame and end frame in each of the relevant segments, and assigns the segment a content category code and/or descriptor(s). *Id.* at col. 16, ll. 19–22. The descriptors may define categories such as profanity, violence, bloodshed, monsters, nudity, or sex. *Id.* at Fig. 5B. The video map may indicate that the described category has none of the defined category (for example, no bloodshed), or may indicate various levels of the defined category, such as implied, explicit, or graphic levels of the defined category. *Id.* Once a segment is assigned a descriptor, logical entry (start) and exit (stop) references are assigned. *Id.* at col. 16, ll. 25–26, col. 20, ll. 1–6. Thus, each segment “is defined by a beginning and ending frame and comprises any number of frames.” *Id.* at col. 20, ll. 4–6. The resulting segment definitions are mapped, and the required user interface is produced. *Id.* at col. 16, ll. 26–28. The video map’s data are provided with video and audio data contained on a CD or other multi-media content source. *Id.* at col. 16, ll. 34–35.

The steps in the production of a variable content video are summarized with respect to the flow chart in Figure 5A. Each scene, segment, or fragment of a segment on a video script is reviewed according to an appropriate video descriptive structure, as shown in Figures 5B–5E. *Id.* at col. 15, ll. 58–63. Where necessary, a video segment is associated with an audio segment, and corresponding separate audio and video category codes are provided. *Id.* at col. 16, ll. 13–18.

The video map itself does not establish or define any specific filtering action. The video map descriptors, such as profanity, violence, bloodshed, monsters, nudity, and sex, by themselves, do not describe or specify a distinct filtering operation. In the context of a movie, for example, a user may watch the

movie unedited, without filtering any content. The video map (and the corresponding user interface) allows the user to filter out, or skip, selected segments (e.g., explicit bloodshed), while retaining all other content. *Id.* at col. 20, ll. 14–25. Alternatively, the video map may identify a segment from somewhere else within that video that can be “grafted” in place of the skipped segment to enhance the artistic seamlessness of a scene. *Id.* at col. 20, ll. 61–65. A grafted segment need not be of the same duration as the segment it replaces. *Id.*

Whatever specific filtering or editing action that may occur, if any, in Abecassis is defined at some later time in a different step of the process. The specific filtering action is not defined as part of the video map that also includes the start and end times of content that may be filtered, as called for in the claims of the '282 patent. At the end of the process, however, once the viewer has selected specific filtering actions, as explained below, Abecassis provides the capability for the system to define a start time for a portion of multimedia content, an end time for the portion, and a filtering action for the portion of the multimedia content defined by the start and end times. Indeed, Patent Owner admitted that Abecassis “accomplishes filtering.” Tr. 32, ll. 20–21 (“Q. Does Abecassis disclose filtering?” “A. It accomplishes filtering.”).

As explained in Abecassis, the disclosed editing system “is intended to significantly transfer censorship, and time-constrained editing decision making from the producer and/or editor to the viewer.” Ex. 1004, col. 22, ll. 22–26. Thus, the producer can maximize the content range of the video “to permit the creation of a greater number of versions of a video and thus appeal to a wider audience and to multiple viewings.” *Id.* at col. 22, ll. 26–29.

Figure 7A in Abecassis, shown below, illustrates the separate editing or filtering step performed by the user or viewer. Figure 7A illustrates a viewer’s

content preferences selection screen 701 specific to the content of a selected video.
Id. at col. 24, ll. 30–31.

703

701

Content Selection Screen

Code	Description	None	Implied	Explicit	Graphic
110	Profanity	1		3	4
130	Violence	1	2	3	
135	Bloodshed	1		3	4
150	Monsters	1	2	3	
170	Nudity	1	2	3	4
175	Sex	1	2	3	

702

704

Please enter the code for the category to modify: 135

Please enter the level for this category: 1

705

706

EXIT STOP HELP PAUSE PREV REW NEXT FF PLAY SKIP PLAY

707

708

FIG. 7A

Figure 7A from Abecassis shows a viewer's selections from the video map.

As shown in Figure 7A, the viewer or user selects content categories 702, shown by bold boxes 703. *Id.* at col. 24, ll. 33–38. In Figure 7A, for example, by selecting “None” for the categories of profanity and bloodshed, the viewer has selected to filter or skip all content that includes any profanity or bloodshed. Thus, in this example, the video map of Abecassis provides for “the option of editing-out the explicit bloodshed” (*id.* at col. 20, ll. 13–15) and “skipping of the playing of a segment” (*id.* at col. 20, ll. 59–60).

b. Malkin

Malkin also discloses a system for editing multimedia video and audio. Ex. 1005, col. 2, ll. 44–52. The disclosed system allows the multimedia content to be “masked, filtered, or modified according to the user’s content specification.” *Id.* at

col. 2, ll. 29–30. A control specification is created, which can be part of the multimedia stream or provided as a separate stream, to allow viewers to specify content preferences. *Id.* at col. 2, ll. 53–62.

A control specification (reference numeral 237) “indicates how the stream content should be modified.” *Id.* at col. 12, ll. 59–62. “It provides instructions on showing the frames or groups of frames of the multimedia streams, [and] specifies blocking, omissions, and overlays.” *Id.* One type of control specification is a separate fuzz-ball track (reference numeral 337). *Id.* at col. 12, ll. 63–64. Another is an edit-decision list, “which indicates which frames to modify or replace.” *Id.* at col. 12, ll. 64–65.

In the Malkin system, third party mask providers provide pre-constructed frame-level masks (as will be discussed below with reference to FIG. 3A) that are used to modify the multimedia content to filter out undesired information. *Id.* at col. 4, ll. 7–12. For example, a client specifies in a video request to the third party provider a content specification “having a violence level value no higher than 3 and a nudity level value no higher than 2” for a particular video. *Id.* at col. 8, ll. 1–6. The appropriate mask, or control specification, is provided so that only the requested level of content is played. *Id.* at col. 8, ll. 1–30. Thus, in Malkin, a third party provides a single system that identifies the frames or groups of frames to be filtered *and also provides the filtering action* for the identified frames. In Abecassis, one party identifies content, and another party, the viewer, performs the filtering action.

Figure 3A in Malkin, shown below, depicts examples of a “fuzz-ball” and a fuzz-ball control specification. A “fuzz ball” can modify/mask one or more specified objects, such as a portion of a video frame or sample of audio, according to user specifications. *Id.* at col. 3, ll. 18–21. Figure 3A in Malkin illustrates a

fuzz-ball control specification for a video stream comprising multiple frames.

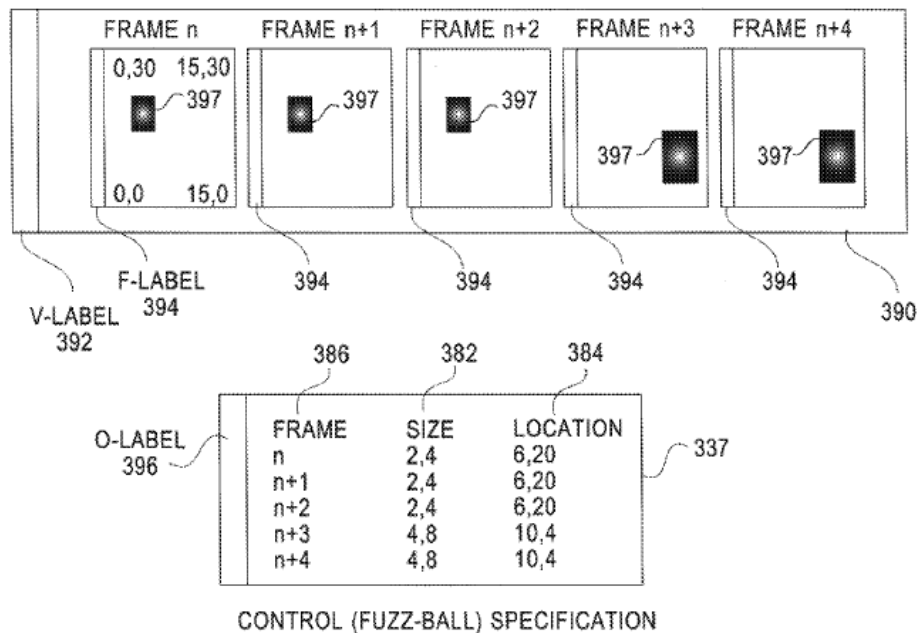


FIG.3A

Figure 3A of Malkin shows a fuzz-ball control specification.

Figure 3A depicts an example of a video stream having a series of adjacent frames, shown as “Frame n,” “Frame n+1,” . . . “Frame n+4.” *Id.* at col. 7, ll. 21–22. In the example shown in Figure 3A, control specification 237 is a separate “fuzz ball” track (reference numeral 337 in Fig. 3A). *Id.* at col. 7, ll. 23–25. Fuzz ball track 337 specifies a sequence of fuzz balls 397 having a size (382), location (384), and a temporal relationship (386) to the video stream (390). *Id.* at col. 7, ll. 32–35. Each frame has a “known dimension.” *Id.* at col. 7, l. 37.

The fuzz balls shown in Figure 3A are embodiments of control specification 237, which indicates how the stream content should be modified. *Id.* at col. 12, ll. 59–60. Control specification 237 “provides instructions on showing the frames or groups of frames of the multimedia streams, and specifies *blocking, omissions, and overlays.*” *Id.* at ll. 60–62 (emphases added). One type of control specification is

fuzz-ball track 337. The control specification is transmitted as a separate stream or file, such as a “fuzz-ball track” (reference numeral 337 in Fig. 3A). *Id.* at col. 8, ll. 42–44.

3. *Asserted Differences Between the Prior Art and Claims 1 and 19*

In determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 164 (Fed. Cir. 1985) (“It is elementary that the claimed invention must be considered as a whole in deciding the question of obviousness.”); *see also Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1537 (Fed. Cir. 1983) (“[T]he question under 35 U.S.C. § 103 is not whether the differences *themselves* would have been obvious. Consideration of differences, like each of the findings set forth in *Graham*, is but an aid in reaching the ultimate determination of whether the claimed invention *as a whole* would have been obvious.”).

We focus our analysis on the limitations in the challenged claims requiring “filtering information”⁸ including at least one identification of a start time and end time, and at least one filtering action for the portion of the multimedia presentation. As stated by Patent Owner, “the primary issue to be resolved is whether Malkin teaches or suggests the ‘filtering information’ (or a navigation object) as required by claims 1-25.” PO Resp. 6.

Patent Owner focuses its argument on Malkin. PO Resp. 6, 7, 16, 20. Patent Owner acknowledges that the fuzz balls in Malkin are a specific filtering

⁸ As noted above, the claims in the ’282 patent do not use the term “navigation object,” but the parties have used this term in their arguments to refer to the limitations in dispute in the claims of the ’282 patent. *See, e.g.*, PO Resp. 6 (“Malkin Does Not Teach Or Suggest A Navigation Object”).

action, but argues “each fuzz-ball is a separate filtering action that is applied to a single frame independently of any other fuzz ball.” *Id.* at 11. Patent Owner “concedes that a frame identifier [as used in Malkin] can serve as an identification of a time within the multimedia content.” *Id.* at 10. Patent Owner also states that in some embodiments of Patent Owner’s technology, the identifications of the start time and end time could be in the form of two frame identifiers. *Id.* It is Patent Owner’s position, however, that without more than a single frame identifier, as is the case with a fuzz-ball in Malkin, “there is no way to identify separate start and end times within the multimedia content.” *Id.*

Substantially all of Patent Owner’s argument is directed to the assertion that Malkin does not disclose a “navigation object” with a start time, an end time, and a filtering action to be performed on the portion of the multimedia presentation defined by the start and end times. *E.g.*, PO Resp. 8–9 (arguing “it is not possible for the fuzz-ball to include an ‘identification of a start time and end time associated with a portion of the multimedia presentation’” and “[a] frame identifier of a fuzz-ball therefore cannot identify a start time and an end time”).

Patent Owner argues that the analysis of whether Malkin reasonably can be combined with Abecassis “is unnecessary because Malkin does not teach or suggest a navigation object.” *Id.* at 20.

Abecassis discloses start and stop positions for defining segments that may be edited or filtered. Ex. 1004, col. 20, ll. 4–6 (“Each segment 603 is defined by a beginning and ending frame and comprises any number of frames 604”). The Abecassis system is intended to include a user-defined filtering action. *See, e.g.*, Ex. 1004, col. 22, ll. 22–26, col. 24, ll. 33–38, Fig. 7A. The evidence also is clear that Malkin discloses a specific filtering action to be applied to selected frames or groups of frames. *See, e.g.*, Ex. 1005, col. 12, ll. 59–62 (control specification 237

“provides instructions on showing the frames or groups of frames of the multimedia streams, and specifies blocking, omissions, and overlays”).

Thus, based on our analysis, and contrary to Patent Owner’s position, all the elements of the claimed filtering information are taught—start and end times from Abecassis, and a pre-defined filtering action included in the system for editing from Malkin. The dispositive issue is whether it would have been obvious to a person of ordinary skill in the relevant technology to include pre-defined filtering actions in Abecassis based on the disclosure in Malkin, rather than require the end-user to make all the filtering decisions.

4. *Level of Ordinary Skill*

The level of skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“the level of skill in the art is a prism or lens through which a judge, jury, or the Board views the prior art and the claimed invention”). The prior art reflects a skill level in the relevant technology. *Id.* at 1355. Neither Petitioner nor Patent Owner proposes a specific level of ordinary skill. In the related IPR2014-00339 and IPR2014-00383 proceedings, we determined that a person having ordinary skill in the art

would typically have (i) a M.S. degree in electrical engineering or computer science (or a related field) with at least a 2-3 years of experience working with signal, video, or data processing, or (ii) a B.S. in electrical engineering or computer science (or a related field) with significant practical experience (4 or more years) working with signal, video, or data processing.

CustomPlay, LLC, v. ClearPlay, Inc., Case IPR2014-00339, slip op. at 19–20 (PTAB, July 21, 2015) (Paper 27). Because the general technology and references in the current proceeding are the same as in the related proceedings, we adopt the same level of ordinary skill.

5. *Rationale to Combine*

Petitioner relies on Malkin solely to teach a specific filtering action to be performed on the portion of the multimedia content defined by the start and end times. Tr. 97, ll. 1–3; Pet. 20–23, 28–31; *see also* Pet. Reply 13 (“Malkin need only contribute an explicit filtering action to Abecassis’ segment definitions.”). As a reason to combine Abecassis and Malkin, Petitioner asserts that both references “teach systems and methods for filtering offensive or otherwise undesirable content from multimedia content during playback,” are in the same field of endeavor, and deal with related subject matter. Pet. 22. Petitioner concludes that a person of ordinary skill in the art “would have readily known to combine the teachings of the two references, yielding ‘predictable variation[s].’” *Id.* (citing *KSR*, 550 U.S. at 417).

Patent Owner asserts that, because neither Malkin nor Abecassis disclose a “navigation object,” the combination of Abecassis and Malkin “cannot teach or suggest a navigation object.” PO Resp. 20–21. We have determined, however, as discussed above that all the elements of the claimed filtering information are taught—start and end times from Abecassis, and a pre-defined filtering action included in the system for editing from Malkin.

The proper obviousness inquiry is whether the claimed inventions are rendered obvious by the teachings of the prior art as a whole. *In re Etter*, 756 F.2d 852, 859 (Fed. Cir. 1985) (en banc). In other words, the question we must ask is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417. In determining whether a patent claiming a combination of elements would have been obvious, the Supreme Court made clear that “the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take

account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 418. “[I]n many cases a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle.” *Id.* at 420. As discussed above, based on education and experience, a person of ordinary skill in the art would have been sophisticated in the relevant technologies, with a background in electrical engineering, computer science, or a related field and with experience in signal, video, or data processing. We further recognize that “[a] person of ordinary skill is also a person of ordinary creativity, not an automaton.” *Id.* at 421. Moreover, “[a] reference must be considered for everything it teaches by way of technology and is not limited to the particular invention it is describing and attempting to protect.” *EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985) (emphasis omitted).

Here, it is clear, based on the reference disclosures, that Abecassis discloses filtering actions taken with respect to the portions defined by start and end times (but not included with the times in a single instance of “filtering information”). Whether those filtering actions are provided by the end-user, as suggested by Abecassis, or are pre-programmed as part of the video map, as suggested by Malkin, would have been an obvious choice for a person of ordinary skill and creativity.

The rationale for the modification comes from the references. First, Abecassis identifies the desirability of incorporating “capabilities and environments that automatically customize the playing of videos to satisfy the requirements” of various viewers, and that deliver “a more enjoyable video experience without requiring the level of active participation inherent in interactive systems.” Ex. 1004, col. 1, ll. 45–52. Abecassis also states the desirability of “automated selective retrieval of non-sequentially stored, parallel, transitional, and

overlapping video segments” (*id.* at col. 2, ll. 1–3); “automated capabilities for efficiently retrieving and playing only a specified class, category, or subject matter included in segments within the selected video” (*id.* at col. 2, ll. 50–53); and “intermittent content skipping methods” (*id.* at col. 3, l. 2).

Malkin similarly points out that the prior art includes “various systems directed towards storing user preferences to select correspondingly encoded videos, and/or video streams.” Ex. 1005, col. 1, ll. 56–58. These systems include “both time and content controls for multiple and variable numbers of viewers.” *Id.* at col. 2, ll. 10–12. Malkin states that there was a need for a system for “flexibly modifying multimedia content so that specific objects, for example a portion of a single video frame or sample of audio, can be dynamically masked, filtered, or modified according to the user’s content specification.” *Id.* at col. 2, ll. 26–30. Malkin cites specifically to a related Abecassis patent, U.S. Patent No. 5,434,678,⁹ as an example of a system that can be improved by the Malkin system. *Id.* at col. 2, ll. 14–25; *see* Pet. 37; *see also* Tr. 7, l. 15–Tr. 9, l. 22 (describing generally that “Malkin itself provides the motivation” (Tr. 8, l. 22)).

Second, Abecassis’s use of skipping (one type of filtering action, as recited in dependent claim 7, for example) provides a reason why a person of ordinary skill in the art would have looked to Malkin. *See* Pet. 31–32. The video map in Abecassis includes codes and descriptors with logical entry and exit references (Ex. 1004, col. 16, ll. 26–27), segments that are linked to each other (*id.* at col. 20, ll. 13–22), and skipping video content in between the segments (*id.* at col. 22, ll. 6–13, col. 33, ll. 56–61). Abecassis teaches skipping portions of multimedia content, as well as including information with the segments of the video map to implement

⁹ U.S. Patent No. 5,434,678 is incorporated by reference in Abecassis. Ex. 1004, col. 4, l. 26–27.

the skipping. *E.g., id.* at Abstract (disclosing “skipping, responsive to the replay request, the video to a replay position that is responsive to a preestablished replay preference”). As explained in Abecassis,

the application of the viewer’s content preferences to the video map results in the automated logical selection of sequential and non-sequential segments of the selected video 924 consistent with the viewer’s video content preferences and the video map. In other words, any segments with a content coding higher (abstract) than the viewer-selected content preference for the corresponding category would not be included in the video produced for the viewer. The segment selected for viewing having a coding level equal to or lower than the viewer specified content preference for that category is selected and provides, where necessary, the next segment beginning frame information. *This will skip over parallel segments* of a lower coding than the viewed segment.

Id. at col. 33, ll. 48–61 (emphasis added). Abecassis discloses linking the end of one segment to the beginning of another, such that content in between would be skipped. *Id.* at col. 20, ll. 14–23. We are persuaded that this teaching would have prompted a person of ordinary skill in the art to look to a reference like Malkin, which includes a similar filtering action in the object itself.

Based on all of the evidence of record, we determine, by a preponderance of the evidence, that it would have been obvious to modify Abecassis to include a pre-defined filtering action, as disclosed in Malkin, such that the combined teachings of the references would result in filtering information including an identification of a start time and end time, and a filtering action. Accordingly, we determine that independent claims 1 and 19 would have been obvious based on Abecassis and Malkin.

6. Dependent Claims

Petitioner presents evidence and argument regarding each of dependent claims 2–18 and 20–25. Pet. 39–49. Patent Owner does not discuss specifically any of the dependent claims. We have reviewed the evidence and arguments presented by the parties and determine that Petitioner has demonstrated, by a preponderance of the evidence, that Abecassis and Malkin teach all of the limitations of challenged dependent claims 2–18 and 20–25, and that a person of ordinary skill in the art would have had reason to combine their teachings to yield the claimed inventions.

III. CONCLUSION

Based on the evidence and arguments, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–25 of the '282 patent are unpatentable under 35 U.S.C. § 103 based on Abecassis and Malkin.

IV. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, based on Petitioner's showing by a preponderance of the evidence, claims 1–25 of the '282 patent are unpatentable.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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